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المعهد القومى للبحوث

NATIONAL RESEARCH COUNCIL OF EGYPT
CAIRO

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A. General Questions

A 1. — SCIENCE PHILOSOPHY, ORGANISATION AND DOCUMENTATION.

1-02993 — **Functions and education of the chemical engineer in Europe.** *Nature, London* (1955), 175, No. 4463, 842-4.

1-02994 — **Man power and resources in defence policy.** *Nature, London* (1955), 175, No. 4461, 739-41.

1-02995 — **Proposed museum of science and technology in the north-west of England.** *Nature, London* (1955), 175, No. 4463, 845-6.

1-02996 — **Scientific and technical man-power for undeveloped territories.** *Nature, London* (1955), 175, No. 4463, 825-7.

1-02997 — CARTER (C.F.). **The work of the science and industry committee.** *Advanc. Sci.* (1955), 11, No. 44, 404-5.

1-02998 — COLE (W.S.). **Regulating international nuclear activities.** *Nucleonics* (1955), 13, No. 3, 47-51.

1-02999 — COURBOT (H.). **L'equipement national exige un plan d'investissement massif.** *Travaux.* (1955), 39, No. 243, 1-4.

1-03000 — FOX (H.M.). **The colours of animals.** *Endeavour* (1955)' XIV, No. 53, 40-7.

1-03001 — ROITMAN (A.). **The technical documentation centre of an engineering firm.** *Microtecnic* (1955), 9, No. 1, 48-51.

1-03002 — STOPES (M.C.). **The new British Museum law.** *Nature, London* (1955), 175, No. 4464, 910.

1-03003 — WYSSLING (A.F.). **Plant cytology and the electron microscope.** *Endeavour* (1955) 14, No. 53, 34-9.

A 2. — SCIENCE AND TECHNICS' HISTORY. BIOGRAPHIES.

1-03004 — BARNES (B.A.) and FOX (L.E.). **Poisoning with** Dieffenbachia. *J. Hist. Med.* (1955), 10, No. 1, 173-81.

1-03005 — DE BROGLIE (L.). **Notice nécrologique sur Albert Einstein.** *C.R. Acad. Sci., Paris.* (1955), 240, No. 18, 1741-5.

1-03006 — CHRISTIE (J.T.). **The ancient university.** *Advanc. Sci.* (1955), 11, No. 44, 375-82.

1-03007 — DANTZIG (D.V.). **Laplace probabiliste et statisticien, et ses précurseurs.** *Arch. Int. Hist. Sci.* (1955), No. 30, 27-37.

1-03008 — DEWHURST (K.). **Anton Chekhov** (1860-1904) **and social medicine.** *J. Hist. Med.* (1955), 10, No. 1, 1-16.

1-03009 — FLORKIN (M.). **Pour une histoire vivante de la médecine scientifique.** *Arch. Int. Hist. Sci.* (1955), No. 30, 53-55.

1-03010 — FRONDEL (C.). **Memorial of Lawson H. Bauer.** *Amer Min.* (1955), 40, No. 34, 283-5.

1-03011 — GOODALL (A.L.). **The royal faculty of physicians and surgeons of Glasgow.** *J. Hist. Med.* (1955), 10, No. 1, 207-25.

1-03012 — HAHN (R.). **Laplace religious views.** *Arch. Int. Hist. Sci.* (1955), No. 30, 38-40.

1-03013 — IZQUIERDO (J.J.). **Relations between scientists of Mexico and the United States (L.J. Montana and S.L. Mitchill).** *J. Hist. Med.* (1955), 10, No. 1, 45-57.

1-03014 — JACOB (CH.). **Notice nécrologique sur Albert Michel-Levy.** *C.R. Acad. Sci. Paris.* (1955), 240, No. 19, 1837-41.

1-03015 — LEIGH (D.). **Jhon Haslam** (1764-1844): **apothecary to Bethlem.** *J. Hist. Med.* (1955), 10, No. 1, 17-44.

1-03016 — LENOBLE (R.). **Le thème du poison.** *Arch. Int. Hist. Sci.* (1955), No. 30, 41-52.

1-03017 — MARCHAND (J.F.) and HOFF (H.E.). **Felice Fontana the laws of irritability. A literal translation of the memoir "De irritabilitatis legibus", 1767. Added material from "Ricerche filosofiche sopra la fisica animale", 1577, and correlation of these editions with the E.G.B. Hebenstreit german translation** 1785. *J. Hist. Med.* (1955), 10, No. 1, 197-206.

1-03018 — MERLEN (R.H.A.). **The veterinary surgeon in the Mogol Empire.** *Brit. Vet. J.* (1955), 3, No. 1, 38-40.

1-03019 — MERLEN (R.H.). **The cuneiform ideograph for "horse".** *Brit. Vet. J.* (1955), No. 3, 128.

1-03020 — O'MALLEY (C.D.). **The relations of John Caius with Andreas Vesalius and some incidental remarks on the Gionta Galen and on Thomas Geminus.** *J. Hist. Med.* (1955), 10, No. 1, 147-72.

1-03021 — PUTMAN (J.). **Pour une histoire irrationaliste des sciences.** *Arch. Int. Hist. Sci.* (1955), No. 30, 56-8.

1-03022 — SHERWOOD TAYLOR (F.). **Leonardo da Vinci.** *Advanc. Sci.* (1955), 11, No. 44, 435-64.

1-03023 — SINGER (C.). **The first english microscopist. Robert Hooke** (1635-1703). *Endeavour* (1955), 14, No. 53, 12-8.

1-03024 — STEVENSON (L.G.). **The elder spence William Combe and John Hunter sidelights on eighteenth-century dentistry and Hunter's natural history of the human teeth.** *J. Hist. Med.* (1955), 10, No. 1, 182-96.

1-03025 — SWITZER (G.). **Memorial of Magnus Vonsen.** *Amer. Min.* (1955), 40, No. 34, 286-8.

1-03026 — THORNDIKE (L.). **Marianus Jacobus Taccola.** *Arch. Int. Hist. Sci.* (1955), No. 30, 7-26.

B. Pure and applied Mathematics

1–03027 — ANDRUNAKIEVICH (V.A.). **In Russian.** (Rings possessing minimal two-side ideals). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 405-8.

1–03028 — ARTEMIADIS (N.). **Deux théorèmes sur les fonctions appartenant à la classe L.** *C.R. Acad. Sci., Paris* (1955), 240, No. 14, 1500-2.

1–03029 — BARUA (S.N.). **A source in rotating fluid.** *Quart. J. Mech.* (1955), 8, No. 1, 22-9.

1–03030 — BASS (G.I.). **In Russian.** (Formulae of the soltion of Cauchy's problem for some differential-difference equations). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 613-6.

1–03031 — BELGODERE (P.). **Sur les surfaces minima en géomérie de Minkowski.** *C.R. Acad. Sci., Paris*(1955), 240, No. 14,1504-5

1–03032 — BLANCHARD (A.). **Espaces fibrés analytiques réels et formes de Kahler analytiques réelles sur les espaces fibrés analytiques complexes.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 12, 1300-2.

1–03033 — BLONDEL (J-M.). **Sur une classe d'équations aux dérivées partielles linéaires.** *C.R. Acad. Sci., Paris* (1955), 240, No. 11, 1181-3.

1–03034 — BOGOLYUBOV (N.N.). and PARASYUK (O.S.). **In Russian.** (The substractive formalism in the multiplication of causative singular functions). *C.R. Acad. Sci. U.R.S.S.,* (1955), 100, No. 3, 429-32.

1–03035 — BORSUK (K.). **Sur la notion de diviseur et de multiple des transformations.** *Bull. Acad. Polonaise. Sci.* (1955), 3, No. 2, 81-6.

1–03036 — BOSE (S.N.). **Solution d'une équation tensorielle intervenant dans la théorie du champ unitaire.** *Bull. Soc. Math. Fr.* (1955), 83, No. 1, 81-7.

1–03037 — BOUGHON (P.). **Formule de Taylor pour un polynome à plusieurs indéterminées sur un anneau de caractéristique $p > o$. Application à la détermination, des surfaces ayant avec leur plan tangent générique un contact d'ordre ≥ 2.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 7, 720-2.

1–03038 — BOUGHON (P.). **Spécialisations et dérivations. Application à la définition du cycle caractéristique d'un diviseur.** *C.R. Acad. Sci., Paris* (1955), 240, No. 11, 1185-7.

1–03039 — BRACHMAN (M.K.). **Note on an integral of Ramanujan.** *J. Math. Phys.* (1955), 33, No. 4, 374-5.

1–03040 — BRICH (B.J.). **On games with almost complete information.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 275-87.

1–03041 — BROWN (L.J.M.). **On conformal mapping of domains of infinite connectivity.** *Ptoc. Camb. Phil. Soc.* (1955), 51, No. 1, 56-64.

1–03042 — CASSELS (J.W.S.). **Bounds for the least solutions of homogeneous quadratic equations.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 262-4.

1–03043 — CHERRY (T.M.). **On Kepler's equation.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 81-91.

1–03044 — CLUNIE (J.). **The asymptotic behaviour of integral functions.** *Quart. J. Math.* (1955), 6, No. 21, 1-3.

1–03045 — COBBE (A.P.). **On the cohomology groups of a finite group.** *Quart. J. Math.* (1955), 6, No. 21, 34-47.

1–03046 — COLLINGWOOD (E.). **Sur le comportement à la frontière, d'une fonction méromorphe sans le cercle-unité.** *C.R. Acad. Sci., Paris* (1955), 240, No. 14, 1502-4.

1–03047 — COLLINGWOOD (E.). **Sur les ensembles d'indétermination maximum des fonctions analytiques.** *C.R. Acad. Paris.* (1955), 240, No. 15, 1604-6.

1–03048 — CONTE (S.D.). **Gegenbauer transforms.** *Quart. J. Math.* (1955), 6, No. 21, 48-52.

1–03049 — COPPEL (W.A.). **The solution of equations by interation.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 41-3.

1–03050 — COX (D.R.). **A use of complex probabilities in the theory of stochastic processes.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 313-9.

1–03051 — CRAIG (E.J.). **The N-step interation procedures.** *J. Math. Phys.* (1955), 34, No. 1, 64-73.

1–03052 — DAVIDSON (J.F.). **Impact bucking of deep beams in pure bending.** *Quart. J. Mech.* (1955), 8, No. 1, 81.

1–03053 — DEHEUVELS (R.). **Notion de suite exacte de faisceaux localement triviale.** *C.R. Acad. Sci., Paris* (1955), 240, No. 11, 1183-5.

1–03054 — DEHEUVELS (R.). **Classe caractéristique d'une application continue.** *C.R. Acad. Sci., Paris.* (1955), 240, No. 12, 1298-300.

1–03055 — DENJOY (A.). **La quasi-analyticité tirée des séries de fractions rationnelles.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 9, 929-32.

1–03056 — DENY (J.). et LIONS (J–L.). **Espaces de Beppo Levi et applications.** *C.R. Acad. Sci., Paris* (1955), 240, No. 19, 1174-6.

1–03057 — DIANANDA (P.H.). **The central limit theorem for dependent variables.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 92-5.

1–03058 — DIEUDONNE (J.). **Lie groups and Lie hyperalgebras over a field of characteristic.** *Amer. J. Math.* (1955), 77, No. 2, 218-44.

1–03059 — DUGUE (D.). **L'existence d'une norme est incompatible avec la convergence en probabilité.** *C.R. Sci., Paris.* (1955), 240, No. 12, 1307.

1–03060 — EHRENPREIS (L.). **Mean periodic functions.** *Amer. J. Math.* (1955), 77, No. 2, 293-328.

1–03061 — EHRENPREIS (L.). **Solution of some problems of division.** *Amer. J. Math.* (1955), 77, No. 2, 286-92.

1-03062 — EHRESMANN (CH.). **Les prolongements d'un espace fibré différentiable.** *C.R. Acad. Sci., Paris.* (1955), 240, No. 18, 1755-7.

1-03063 — EHRHART (E.). **Sur les ovales et les ovoides.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 6, 583-5.

1-03064 — EHRHART (E.). **Sur les ovales en géométrie des nombres.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 9, 935-8.

1-03065 — EISERMAN (M.A.) and GANTMACHER (F.P.) **In Russian** (Of a class of dynamic problems reducible to the theory of relay-systems). *Appl. Math. Mech. Leningr.* (1955), 19, No. 2, 222-4.

1-03066 — ERUGIN (N.P.) **In Russian.** (Some general problems of the qualitative and analytical theory of linear systems of linear equations). *Appl. Math. Mech., Leningr.* (1955), 19, No. 2, 211-21.

1-03067 — EYDUS (D.M.). **In Russian.** (The limiting problem of the equation $\Delta u + \lambda^2 u = 0$). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 631-3.

1-03068 — FAN (K.), TAUSSKY (O.) and TODD (J.). **Discrete analogs of wirtinger.** *Mh. Math.* (1955), 59, No. 2, 73-90.

1-03069 — FILIPPOV (A.F.) **In Russian.** (The stability of differential equations). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1045-8.

1-03070 — FLETT (T.M.). **Some remarks on schlicht functions and harmonic functions of uniformly bounded variation.** *Quart. J. Math.* (1955), 6, No. 21, 59-72.

1-03071 — FUCHS (A.). **Sur certains opérateurs linéaires associés aux processus réels de Markoff.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 14, 1506-7.

1-03072 — GAUTHIER (L.). **Nombre de Betti des intersections complètes de formes quadratiques.** *C.R. Acad. Sci., Paris.* (1955), 240, No. 19, 1851-3.

1-03073 — GELFAND (I.M.). **In Russian.** (Generalized casual processes). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 853-6.

1-03074 — GERMAIN (C.). **Emploi de la cuve rhéographique conjuguée dans l'étude des systèmes à symétrie de révolution.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 6, 588-9.

1-03075 — GILLIES (A.W.). **The periodic solutions of a non-linear differential equation of the second order with unsymmetrical non-linear damping and forcing term.** *Quart. J. Mech.* (1955), 8, No. 1, 107.

1-03076 — GLUSHKOV (V.M.). **In Russian.** (The exact triangular representation of the Z-algebras of Lee). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 617-20.

1-03077 — GODDARD (L.S.). **Transition matrices occurring in the theory of Markoff processes.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 382-4.

1-03078 — GOOD (I.J.). **A new finite series for Legendre polynomials.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 385-8.

1-03079 — GRIB (A.A.) and RYABININ (A.G.) **In Russian.** (The question of the approximate integration of equations of the plane steady supersonic movement of a gas). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 425-8.

1-03080 — GRIFFITHS (H.B.). **A note on commutators in free products II.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 245-51.

1-03081 — GREEN (J.A.). **On the converse to a theorem of R. Brauer.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 237-9.

1-03082 — GUINAND (A.-P.). **Généralisation d'une identité de M. Halphen.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 6, 582-3.

1-03083 — GUERINDON (J.). **Sur les modules union ou inter-irréductibles.** *C.R. Acad. Sci., Paris* (1955), 240, No. 21, 2042-4.

1-03084 — HARTMAN (P.) and WINTNER (A.). **On uniform conditions in the theory of linear partial differential equations of elliptic type.** *Amer. J. Math.* (1955), 77, No. 2, 329-54.

1-03085 — HENON (M.). **Machine analogique pour le calcul de l'indice complexe d'un corps à partir de son pouvoir réflecteur.** *C.R. Acad. Sci., Paris.* (1955), 240, No. 12, 1305-6.

1-03086 — HERMANN (R.). **Sur les espaces homogenes compacts de caractéristique positive.** *C.R. Acad. Sci., Paris.* (1955), 240, No. 12, 1303-5.

1-03087 — HERMANN (R.). **Sur les isométries infinitésimales et le groupe d'holonomie d'un espace de Riemann.** *C.R. Acad. Sci., Paris* (1955), 240, No. 19, 1178-81.

1-03088 — HERSCH (J.). **Equations differentielles et fonctions de cellules.** *C.R. Acad. Sci., Paris* (1955), 240, No. 15, 1602-4.

1-03089 — HERSTEIN (I.N.). **On the Lie and Jordan rings of a simple associative ring.** *Amer. J. Math.* (1955), 77, 2, 279-85.

1-03090 — HERVE (M.). **Sur les valeurs omises par une fonction méromorphe.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 7, 718-20.

1-03091 — HEYWOOD (P.). **On the intergrability of functions defined by trigonometric series (II).** *Quart. J. Math.* (1955), 6, 21, 77-9.

1-03092 — HILTON (P.J.). **A note on the homomorphism in homotopy groups of spheres.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 230-3.

1-03093 — HIONG (K.-L.). **Sur certaines valeurs exceptionnelles des fonctions holomorphes dans le cercle-unité et de leurs dérivées.** *C.R. Acad. Sci., Paris* (1955), 240, No. 17, 1685-7.

1-03094 — HORNICH (H.). **Überall unlösbare lineare partielle Differentialgleichungen.** (Equations differentielles partielles linéaires complétement insolubles). *Mh. Math.* (1955), 59, No. 1, 34-42.

1-03095 — HORVAY (G.) and BORN (J.S.). **Tables of self-equilibrating functions.** *J. Math. Phys.* (1955), 33, No. 4, 360-73.

1-03096 — HUET (D.). **Sur la confluence des fonctions de Bessel généralisées.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 12, 1297-8.

1-03097 — HUKUHARA (M.). **Sur l'application qui fait correspondre à un point un continu bicompact.** *Proc. Jap. Acad.* (1955), 31, No. 1, 5-7.

1-03098 — HURON (R.). **Loi multinomiale et test du X2.** *C.R. Acad. Sci., Paris* (1955), 240, No. 21, 2047-9.

1-03099 — HUZURBAZAR (M.S.). **The classical canonical form of a nilpotent matrix.** *Quart. J. Math.* (1955), 6, No. 21, 73-6.

1-03100 — ILIEV (L.). **In Russian.** (The divided difference for limited one-sheet functions). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 861-2.

1-03101 — ILIEV (L.). **In Russian.** (Theorem of the one-sheet character of finite sums of trisymmetrical one-sheet functions). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 621-2.

1-03102 — INOKUMA (T.). **On a characteristic property of completely normal spaces.** *Proc. Jap. Acad.* (1955), 31, No. 2, 56-9.

1-03103 — INOUE (Y.). **Some remarks on abhomotopy groups** *Proc. Jap. Acad.* (1955), 31, No. 2, 60-5.

1-03104 — ISÈKI (K.). **Sur un théorème de G. Thierrin concernant demi-groupe limitatif.** *Proc. Jap. Acad.* (1955), 31, No. 2, 54-5.

1-03105 — ISÉKI (K.). **Vector-space valued functions on semigroups.** *Proc. Jap. Acad.* (1955), 31, No. 1, 16-9.

1-03106 — JONES (D.S.). **Note on the steady flow of a fluid past a thin aerofoil.** *Quart. J. Math.* (1955), 6, No. 21, 4-8.

1-03107 — KAMPE DE FERIET (J.). **Intégrales aléatoires de l'équation de la chaleur dans une barre infinie.** *C.R. Acad. Sci , Paris,* (1955), 240, No. 7, 710-2.

1-03108 — KANGO (I.N.). **Corrections to the paper "linear graphs of degree and their groups".** *Amer. J. Math.* (1955), 77, No. 2, 392.

1-03109 — KANTZ (G.). **Über den Typus eines Zerlegungsringes.** (Sur les types d'un anneau de décomposition). *Mh. Math.* (1955) 59, No. 2, 104-10.

1-03110 — KANTZ (G.). **Beziehungen zwischen den koeffizienten einer analytischen Funktion und ihrer Umkehrfunktion.** (Relation entre les coefficients d'une fonction analytique et sa fonction inverse). *Mh. Math.* (1955), 59, No. 1, 27-33.

1-03111 — KAWADA (Y.) and TATE (J.). **On the Galois cohomology of unramified extensions of function fields in one variable.** *Amer. J. Math.* (1955), 77, No. 2, 197-217.

1-03112 — KERTESZ (A.). **On arbitrary systems of linear equations over semi-simple rings.** *Bull. Acad. Polonaise. Sci.* (1955), 3, No. 2, 73-4.

1-03113 — KHARAZOV (D.F.). **In Russian.** (The investigation of the limiting problems for elliptic differential equations). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 421-4.

1-03114 — KINUKAWA (M.). **On the integro-jump of a function and its Fourier coefficients.** *Proc. Jap. Acad.* (1955), 31, No. 2, 45-8.

1-03115 — KLEPIKOV (N.P.) **In Russian.** (The solution of a system of equations for a vacuum functional). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1057-9.

1-03116 — KOBAYASHI (S.). **Une remarque sur la connexion affine symétrique.** *Proc. Jap. Acad.* (1955), 31, No. 1, 14-5.

1-03117 — KOSINSKI (A.). **A theorem on monotone mapping.** *Bull. Acad. Polonaise. Sci.* (1955), 3, No. 2, 69-72.

1-03118 — KOVANTZOV (N.I.). **In Russian.** (Pairs of complexes of projected rotation). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 863-6.

1-03119 — KREIN (M.G.). **In Russian.** (A new method for solving linear integral equations of the first and second order). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 413-16.

1-03120 — KUBILYUS (I.P.). **In Russian.** (The distribution of the values of the additive arithmetic functions). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 623-6.

1-03121 — KUNUGI (K.). **Sur les espaces complets et régulièrement complets. III.** *Proc. Jap. Acad.* (1955), 31, No. 2, 49.

1-03122 — KURAMOCHI (Z.). **Dirichlet problem on Riemann surfaces. V (on covering surfaces).** *Proc. Jap. Acad.* (1955), 13, No. 1, 20-4.

1-03123 — KURAMOCHI (Z.). **Harmonic measures and capacity of sets of the ideal boundary. II.** *Proc. Jap. Acad.*)1955), 13, No. 1, 25-30.

1-03124 — KURATOWSKI (K.). **Un théoréme sur les espaces completes et ses applications à l'étude de la connexité locale.** *Bull. Acad. Polonaise. Sci.* (1955), 3, No. 2, 75-80.

1-03125 — LACOMBE (D.). **Classes récursivement fermées et fonctions majorantes.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 7, 716-8.

1-03126 — LEGRAND (G.). **Sur les espaces homogènes presque complexes.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 21, 2044-7.

1-03127 — LEGRAND (G.). **Connexions infinitésimales définies sur l'espace fibré des repères affines d'une variété différentiable.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 6, 586-8.

1-03128 — LEIGH (D.C.F.). **The laminer boundary-layer equation: a method of solution by means of an automatic computer.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 320-32.

1-03129 — LEVY (P.). **Sur une classe de fonctions aléatoires gaussiennes.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 12, 1308-9.

1-03130 — LEVY (P.). **Le mouvement brownien à $n=2p+1$ paramétres.** *C.R. Acad. Sci., Paris* (1955), 240, No. 19, 1181-3.

1-03131 — LIEBECK (H.). **A note on prime-power groups with symmetrical generating relations.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 394-5.

1-03132 — LOEVE (M.). **Termes variationnels dans le modèle limite central.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 7, 722-4.

1-03133 — LOTKIN (M.). **The solution by iteration of nonlinear integral equations.** *J. Math. Phys.* (1955), 33, No. 4, 346-55.

1-03134 — MAKSIMOV (Yu.D.). **In Russian.** (Limit problems in some classes of analytical functions). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1041-4.

1-03135 — HAMILTON (J.), and SALAM (A.). **The bound state representation.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 103-12.

1-03136 — MATSUSHITA (S.). **Fonctions presque périodiques du type spécial. I.** *Proc. Jap. Acad.* (1955), 31, No. 2, 70-5.

1-03137 — MAULDON (J.G.). **Compositic matrices.** *Quart. J. Math.* (1955), 6, No. 21, 80.

1-03138 — MEDVEDEV (B.V.). **In Russian.** (The unitary character of the S-matrix in the quantum field theory with non-local interaction). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 433-5.

1-03139 — METHEE (P-D). **Transformées de Fourier de distributions invariantes.** *C.R. Acad. Sci., Paris* (1955), 240, No. 11, 1179-81.

1-03140 — MICHAL (A.D.). and HYERS (E.H.). **Solutions of differential equations as analytic functionals of the coefficient functions.** *Acta. Math. Stockh.* (1954), 91, No. 1/2, 75-86.

1-03141 — MINORSKY (N.). **Sur l'espace paramétrique de l'équation de M. Liénard.** *C.R. Acad. Sci., Paris* (1955), 240, No. 14, 1508-9.

1-03142 — MITROVIC (D.). **Conditions graphiques pour que toutes les racines d'une équation algébrique soient à parties réelles négatives.** *C.R. Acad. Sci., Paris* (1955), 240, No. 11, 1177-9.

1-03143 — MOHANTY (R.) and NANDA (M.). **The summability by logarithmic means of the derived fourier series.** *Quart. J. Math.* (1955), 6, No. 21, 53-8.

1-03144 — MOSTOW (G.D.). **On covariant fiberings of Klein spaces.** *Amer. J. Math.* (1955), 77, 2, 247-78.

1-03145 — MUNN (W.D.). **On semigroups algebras.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 1-15.

1-03146 — NARAYANA (T.V.). **Sur les treillis formés par les partitions d'un entier et leurs applications à la théorie des probabilités.** *C.R. Acad. Sci., Paris* (1955), 240, No. 11, 1188-9.

1-03147 — NEVEU (J.). **Sur une hypothèse de Feller à propos de l'équation de Kolmogoroff.** *C.R. Acad. Sci., Paris*, (1955), 240, 240, No. 6, 590-1.

1-03148 — NUNN (W.D.). and PENROSE (R.). **A note on inverse semigroups.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 396-9.

1-03149 — OPPENHEIM (A.). **On indefinite binary quadratic forms.** *Acta Math., Stockh.* (1954), 91, No. 1/2, 43-50.

1-03150 — PARASYUK (O.S.). **In Russian.** (The theory of causative singular functions). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 643-5.

1-03151 — PARODI (M.). **Sur une propriété des courbes planes dont le rayon de courbure est une fonction rationnelle de l'abscisse ou de l'ordonnée.** *C.R. Acad. Sci., Paris* (1955), 240, No. 19, 1177-8.

1-03152 — PARODI (M.). **A propos d'un théorème de Pellet.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 17, 1683-5.

1-03153 — PARODI (M.). **Cycloïde et spirale de Cornu.** *C.R. Acad. Sci. Paris*, (1955), 240, No. 18, 1754-5.

1-03154 — PATANKER (V.N.). **A note on recurrent events.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 96-102.

1-03155 — PATTERSON (E.M.). **Note on nilpotent and solvable algebras.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 37-40.

1-03156 — PAYNE (L.E.) and WEINBERGER (H.F.). **New bounds in harmonic and biharmonic problems.** *J. Math. Phys.* (1955), 33, No. 4, 291-307.

1-03157 — PENNINGTON (W.B.). **On Ingham summability and summability by lambert series.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 65-80.

1-03158 — PICCARD (S.). **Les relations caractéristiques des bases du second ordre du groupe symétrique.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 18, 1751-4.

1-03159 — PINGROSE (J.R.). **Compact linear operators of Volterra type.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 44-55.

1-03160 — PINL (M.) und (SCHUFF (K.). **Zur Theorie der hermitischen Kreise.** (Sur la théorie des cercles hermitiques). *Mh. Math.* (1955), 59, No. 1, 22-6.

1-03161 — PLIS (A.). **On the problem of non-local existence for first integrals of a system of ordinary differential equations.** *Bull. Acad. Polonaise. Sci.* 3, No. 2, 63-8.

1-03162 — PLOTKIN (B.I.). **In Russian.** (The theory of solvable groups with the condition of finiteness). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 417-20.

1-03163 — PRACHAR (K.). **Über die Anzahl der Teiler einer natürlichen Zahl, welche die form p - 1 haben.** (Sur le nombre de parties d'un nombre naturel, qui ont la forme p-1). *Mh. Math.* (1955), 59, No. 2, 91-7.

1-03164 — PRACHAR (K.). **Über die Summe** (Sur la somme $\Sigma e(\alpha p)$. $p \leq N$.). *Mh. Math.* (1955), 59, No. 1, 43-4.

1-03165 — PRACHAR (K.). **Über die Lösungszahl eines Systems von Gleichungen in Primzahlen.** (Sur le nombre de solutions d'un système d'equations en nombres premiers). *Mh. Math.* (1955), 59, No. 2, 98-102.

1-03166 — RAMBAH (R.P.). **Polar reciprocal convex bodies.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 377-8.

1-03167 — RAVETZ (J.R.). **A descriptive analysis of continuous functions of two real variables.** *Quart. J. Math.* (1955), 6, No. 21, 9-26.

1-03168 — RAYMOND (M.F.H.). **Structure générale d'une calculatrice numérique universelle.** *Bull. Soc. Franc. Elect.* (1955), 5, No. 50, 95-108.

1-03169 — REES (D.A.). **A note on valuations associated with a local domain.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 252-3.

1-03170 — ROBERTS (G.T.). **Topologies defined by bounded sets.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 379-81.

1-03171 — RUBINSTEIN (G.Sh.). **In Russian.** (The problem of the limiting point of intersection of an axis with a polyhedron and its application to the study of a finite system of linear inequalities). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 627-30.

1-03172 — RUTISHAUSER (H.). et BAUER (F.L.). **Détermination des vecteurs propres d'une matrice par une méthode itérative avec convergence quadratique.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 17, 1680-1.

1-03173 — SALEM (R.) et ZYGMUND (A.). **Sur un théorème de Piatetcki-Shapiro.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 21, 2040-2.

1-03174 — SALEM (R.). **On strong summability of Fourier series** *Amer. J. Math.* (1955), 77, No. 2, 393-403.

1-03175 — SALZER (H.E.). **Equally weighted quadrature formulas over semi-infinite and infinite intervals.** *J. Math. Phys.* (1955), 34, No. 1, 54-63.

1-03176 — SALZER (H.E.). **A simple method for summing certain slowly convergent series.** *J. Math. Phys.* (1955), 33, No. 4, 356-9.

1-03177 — SATO (T.). **Sur l'application qui fait correspondre à une courbe une famille de courbes.** *Proc. Jap. Acad.* (1955), 31, No. 1, 1-4.

1-03178 — SAWYER (D.B.). **The lattice determinants of asymmetrical convex regions (III).** *Quart. J. Math.* (1955), 6, No. 21, 27-33.

1-03179 — SCHINZEL (A.). **On the equation $x_1x_2...x_4=t^k$** *Bull. Acad. Polonaise. Soc.* (1955), 3, No. 1, 17-20.

1-03180 — SCHUTZENBERGER (M.P.). **Sur les problèmes de communications métriques.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 7, 724-6.

1-03181 — SHAMANSKY (V.E.). **In Russian.** (An approximate method for the solution of the Dirichle's problem for Laplace's equation). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1049-52.

1-03182 — SHANKS (D.). **Nonlinear transformations of divergent and slowly convergent sequences.** *J. Math. Phys.* (1955), 34, No. 1, 1-42.

1-03183 — SHERMAN (S.). **Doubly stochastic matrices and complex vector spaces.** *Amer. J. Math.* (1955), 77, No. 2, 245-6.

1-03184 — SHIMANOV (S.M.). **In Russian.** (A means of obtaining the conditions of existence of periodical solutions of non-linear systems). *Appl. Math. Leningr.* (1955), 19, No. 2, 225-8.

1-03185 — SIBUYA (Y.). **Sur les points singuliers d'une équation dffirentielle ordinaire du premier ordre.** *Proc. Jap. Acad.* (1955), 31, No. 2, 41-4.

1-03186 — SIEGEL (K.M.). **Bounds of the Legendre function.** *J. Math. Phys.* (1955), 34, No. 1, 43-49.

1-03187 — SIKORSKI (R.). **A remark on the Mazur-Orlicz theory of summability.** *Bull. Acad. Polonaise. Soc.* (1955), 3, No. 1, 11-6.

1-03188 — SIKORSKI (R.). **On complete boolean algebras** *Bull. Acad. Polonaise. Soc.* (1955), 3, No. 1, 7-10.

1-03189 — SLATER (L.J.). **The integration of hypergeometric functions.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 288-96.

1-03190 — SMIRONOV (M.M.). **In Russian.** (The integration of a system of differential equations). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 127-8.

1-03191 — SPONSLER (G.C.). **Two formulae involving generalized Legendre functions of integral and nonintegral index.** *J. Math. Phys.* (1955), 34, No. 1, 50-3.

1-03192 — STOWIKOWSKI (W.). **A generalization of the theory of distributions.** *Bull. Acad. Polonaise. Soc.* (1955), 3, No. 1, 3-6.

1-03193 — TAKAHASHI (S.). **Notes on the Riemann-sum.** *Proc. Jap. Acad.* (1955), 31, No. 1, 8-12.

1-03194 — TAYLOR (S.J.). **The dimensional measure of the graph and set of zeros of a brownian path.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 265-74.

1-03195 — TAUNT (D.R.). **Remarks on the isomorphism problem in theories of construction of finite groups.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 16-24.

1-03196 — TER HAAR (D.) and GREEN (C.D.). **The Ehrenfests' wind-wood model in two dimensions.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 141-8.

1-03197 — TRESSE (M.A.). **Théorie élémentaire des géométries non euclidiennes.** *Bull. Soc. Math. Fr.* (1955), 83, No. 1, 1-56.

1-03198 — TUANT (D.R.). **Finite groups having unique proper characteristic sugbroups. I.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 25-36.

1-03199 — VASILIEV (V.V.). **In Russian.** (Solution of Cauchi's problem for a class of linear integral-differential equations). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 849-52.

1-03200 — VILLAMAYOR (O.). **Sur les équations et les système linéaires dans les anneaux associatifs.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 17, 1681-3.

1-03201 — VILLAMAYOR (O.). **Sur les équations et les systèmes liéaires dans les anneaux associatifs. II.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 18, 1750-1.

1-03202 — VISHIK (M.I.). **In Russian.** (Mixed limiting problems for systems of differential equations containing a second derivative with respect to time, and an approximate method for their solution). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 409-12.

1-03203 — VOGEL (W.). **Ein graphisches Verfahren zur Lösung von linearen Differentialgleichungen zweiter Ordnung.** (Graphic method for the solution of linear quadratic differential equations). *Ingen. Arch.* (1955), 23, No. 2, 119-21.

1-03204 — WASOW (W.). **Discrete approximations to elliptic differential equations.** *Z. angew. Math. Phys.* (1955), 6, No. 2, 81-96.

1-03205 — WARD (A.J.). **On relations between certain intrinsic topologies in partially ordered sets.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 254-61.

1-03206 — WEINBERG (M.M.). **In Russian.** (Some properties of the quadratic forms in space L^q ($q \leq 2$). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 845-8.

1-03207 — WELL (A.). **On algebraic groups of transformations.** *Amer. J. Math.* (1955), 77, No. 2, 355-91.

1-03208 — WOOYENAKA (Y.). **On Newman algebra. III.** *Proc. Jap. Acad.* (1955), 31, No. 2, 66-9.

1-03209 — WUNDERLICH, (W.). **Über Loxodromen auf Zylindern 2. Grades.** (Sur les loxodromes sur un cylindre du 2e degré). *Mh. Math.* (1955), 59, No. 2, 111-8.

1-03210 — YANO (K.). **Quelques remarques sur les variétés à structure presque complexe.** *Bull. Soc. Math. Fr.* (1955), 83, No. 1, 57-80.

1-03211 — ZUBOV (V.I.). **In Russian.** (The theory of A.M. Lyapunov's second method). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 857-9.

C. Astronomy and Geophysics

C 1. ASTRONOMY AND ASTROPHYSICS

1–03212 — ALON (I.), ARSAC (J.) et STEINBERG (J-L.). **Observations interférométriques du rayonnement solaire sur 9350 MHz.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 6, 595-8.

1–03213 — ABBOTT (W.). **Etude de la variation des brillances absolues dans la couronne avec le cycle solaire.** *C.R. Acad. Sci., Paris*, (1955). 240, No. 7, 729-31.

1–03214 — ARSAC (J.). **Nouveau réseau pour l'observation radio-astronomique de la brillance sur le Soleil à 938 5Mc/s.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 9, 942-5.

1–03215 — CANAVAGGIA (R.). **Les Céphéides, rougissement et variation du rayon.** *C.R. Acad. Sci., Paris* (1955), 240, No. 21, 2051.

1–03216 — FUJITA (Y.). **On the red carbon stars.** *Proc. Jap. Acad.* (1955), 31, No. 2, 76-80.

1–03217 — HATANAKA (T.), SUZUKI (S.) and TSUCHIYA (A.) **Observations of polarization of solar radio bursts.** *Proc. Jap. Acad.* (1955), 31, No. 2, 81.

1–03218 — HOYLE (F.). **The horizon of the steady-state universe.** *Nature, London* (1955), 175, No. 4462, 808.

1–03219 — HARTZ (T.R.). **A solar noise outburst of January** 15, 1955. *Nature, London* (1955), 175, No. 4464, 908.

1–03220 — IDLIS (G.M.). **In Russian.** (The influence of the structure of the galaxy on the dispersion of the peculiar velocities of stars and interstellar clouds). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 635-8.

1–03221 — LIPPINCOTT (S.L.). **Sur les changements rapides de la structure fine de la chromosphère, au voisinage d'un centre d'activité.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 6, 593-5.

1–03222 — MILOSEVIC (K.). **Nouvelle détermination de la vitesse angulaire de rotation du Soleil.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 7, 731-3.

1–03223 — POLOSKOV (S.M.). **In Russian.** (The interpretation of the infra-red spectrum of comets). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 639-42.

1–03224 — PECKER (DH.). **Le calcul de la largeur équivalente des raies de Balmer. Application au cas solaire.** *C.R. Acad. Sci. Paris.* (1955), 240, No. 19, 1860-2.

1–03225 — ROJAS (H.) et HERMAN (R.). **Sur une méthode de classification des étoiles B.** *C.R. Acad. Sci., Paris*, (1955). 240, No. 7, 727-9.

1–03226 — REGEMORTER (H. van). **La température d'excitation des raies faibles et fortes.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 21, 2053-5.

1–03227 — ROSH (J.). **Données morphologiques nouvelles sur la granulation photosphérique solaire.** *C.R. Acad. Sci., Paris* (1955), 240, No. 16, 1630-2.

1–03228 — SIMON (P.). **Activité géomagnétique et taches solaires.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 9, 940-2.

1–03229 — SIMON (P.). **Relations entre la fréquence critique de la couche F2 de l'ionosphère à Fribourg et les centres d'activité solaire pendant les années** 1948-1951. *C.R. Acad. Sci., Paris*, (1955), 240, No. 11, 1192-3.

1–03230 — TOMASCHEK (R.). **Tidal gravity measurements in the Shetlands: Effect of the total eclipse of June** 30, 1954, *Nature, London* (1955), 175, No. 4465, 937-9.

1–03231 — VAUQUOIS (R.). **Remarques sur le rayonnement radio-électrique solaire sur 10cm.,** *C.R. Acad. Sci., Paris*, (1955), 240, No. 19, 1862-4.

1–03232 — WALSH (D.). and BROWN (R.H.). **A radio survey of the great loop in cygnus.** *Nature, London* (1955), 175, No. 4462, 808-9.

C 2. GEOPHYSICS

1–03233 — ALLEN (F.C.), GLOVER (R.E.), GARSTKA (W.U.) and POSZ (H.M.). **Heated precipitation-gage intake tube.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 311-5.

1–03234 — ALPERT (L.). **Silver iodide cloud seeding in Puerto Rico.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 227-34.

1–03235 — ANDERSON (R.C.). **A gravity survey of the Rio Grande trough near Socorro, New Mexico** *Trans. Amer. Geophys. Un.* (1955), 36, No. 1, 144-8.

1–03236 — ANDERSON (H.W.). **Detecting hydrologic effects of changes in watershed conditions by double-mass analysis.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 1, 119-25.

1–03237 — ATKINS (W.R.G.) and JENKINS (P.G.). **Identification of water-masses by their suspended matter.** *Nature, London* (1955), 175, No. 4465, 951-

1–03238 — APPLETON (E.). **Storms in the ionosphere.** *Endeavour* (1955), 14, No. 53, 24-8.

1–03239 — AUBBAT (J.) et MOLARD (P.). **Secousses seismiques provoquées par des eruptions volcaniques sous-marines.** *Ann. Geophys.* (1955), 2, No. 1, 109-13.

1–03240 — BRUCE (R.J.M.) and BULL (C.). **Geophysical work in North Greenland.** *Nature, London* (1955), 175, No. 4464, 892-3.

1–03241 — BRYSON (R.A.). **Convective heat transfer with light winds.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 209-13.

1–03242 — BRACEWELL (R.N.). **Correcting for gaussian aerial smoothing.** *Aust. J. Phys.* (1955), 8, No. 1, 54-60.

1–03243 — BULLEN (K.E.). **Some trends in modern seismology.** *Sci. Progr.* (1955), 43, No. 170, 211-27.

1–03244 — BULLARD (E.C.). **Introduction to a discussion on "movements in the earth's core and electrical conductivity".** *Ann. Géophys.* (1955), 2, No. 1, 49-52.

1-03245 — BELLUIGI (A.). **Prospection géophysique à l'aide d'émetteurs alternatifs et champs au sol pour différents types de ces émetteurs.** *C.R. Acad. Sci., Paris* (1955), 240, No. 16, 1657-9.

1-03246 — BULLEN (K.E.). **Physical properties of the earh's core.** *Ann. Géophys.* (1955), 2, No. 1, 53-64.

1-03247 — BERTHIER (P.). **Variations saisonnières de l'intensité des bandes de molécules OH et O atmosphérique dans la luminescence du ciel nocturne.** *C.R. Acad. Sci., Paris.* (1955), 240, No. 18, 1796-8.

1-03248 — BERTHIER (P.). **Variations d'intensité post-crépusculaires et nocturnes des bandes de OH et O du proche infrarouge.** *C.R. Acad. Sci. Paris.* (1955), 240, No. 19, 1919-21.

1-03249 — CROZIER (W.D.) and SEELY (B.K.). **Concentration distribution in aerosol plumes three to twenty-two miles from a point source.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 1 42-52.

1-03250 — COULOMB (J.). **Variation seculaire par convergence ou divergence à la surface du noyau.** *Ann. Géophys.* (1955), 2, No. 1, 80-2.

1-03251 — CABANNES (J.) et DUFAY (J.). **Nouvelles mesures de la longueur des radiations rouges $^1D_2$ $^3P_2$ et $^1D_1$ ^{3} P de l'atome neutre d'oxygène dans la lumière du ciel nocturne.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 6, 573-6.

1-03252 — DINGER (J.E.) and FISHER (G.H.). **Microseism and Ocean wave studies on Guam.** *Trans. Amer. Geophys.Un.* (1955), 36, No. 2, 262-72.

1-03253 — DROKIN (A.I.). **In Russian.** (A new method of controlling the compensation of the earth magnetic field in investigations with a vertical astatic magnetometer). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 199-200.

1-03254 — EWING (M.) and PRESS (F.). **Tide-gage disturbances from the great eruption of Krakatoa** *Trans. Amer. Geophys. Un.* (1955), 36, No. 1, 53-60.

1-03255 — FLAXMAN (E.M.) and HOBBA (R.L.). **Some factors affecting rates of sedimentation in the Columbia River Basin.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 293-300.

1-03256 — FELICE (P. de). **Etude de la formation des rides de sable.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 11, 1253-5.

1-03257 — GLOCK (W.S.). **Tree growth and rainfall.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 315-78.

1-03258 — GERHARDT (J.R.), JEHN (K.H.) and KATZ (I.). **A comparison of step-, pressure-, and continuous wire-gage wave recordings in the Golden Gate Channel.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 235-50.

1-03259 — GERSHMAN (B.N.) and GINSBURG (V.L.). **In Russian.** (The mechanism of formation of ionospheric heterogeneities). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 647-50.

1-03260 — GAUSSEN (H.). **Détermination des climats par la méthode des courbes ombrothermiques.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 6, 642-3.

1-03261 — HUNTUSH (M.S.) and JACOB (C.E.). **Steady three-dimensional flow to a well in a two-layered aquiver.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 286-92.

1-03262 — HEISLER (L.H.). **A panoramic ionospheric recorder for the study of travelling distrubances in the ionosphere.** *Aust. J. Appl. Sci.,* (1955), 6, No. 1, 1-6.

1-03263 — HANTUSH (M.S.) and JACOB (C.E.). **Non-steady radial flow in an infinite leaky aquifer** *Trans. Amer. Geophys. Un.* (1955), 36, No. 1, 95-100.

1-03264 — JUGLE (W.) and COULTER (H.). **The Mt. Spurr. eruption, July 9,** 1953. *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 199-202.

1-03265 — JONES (A.V.). **Infra-red spectrum of the night sky near 10000 A.** *Nature, London* (1955), 175, No. 4465, 950-1.

1-03266 — JOBERT (N.). **Effet de la courbure de la terre sur les ondes de Love.** *Ann. Géophys.* (1955), 2, No. 1 1-48.

1-03267 — JANCZEWSKI (E.W.). **Une nouvelle méthode de détermination des coordonnées hypocentrales d'un séisme rapproché.** *Bull. Acad. Polonaise. Soc.* (1955), 3, No. 1, 55-9.

1-03268 — KNAPP (D.G.). **The synthesis of external magnetic fields by means of radial internal dipoles.** *Ann. Geophys.* (1955), 2, No. 83-90.

1-03269 — LOWES (F.J.). **Secular variation and the non-dipole field.** *Ann. Geophys.* (1955), 2, No. 1, 91-4.

1-03270 — LEJAY (P.). et CAHIERRE (L.). **Essai d'application du calcul de différences de potentiel de la pesanteur entre la Méditerranée et l'Océan Atlantique.** *C.R. Acad. Sci., Paris.* (1955), 240, No. 19, 1843-6.

1-03271 — LAIRD (A.D.K.). **A model study of wave action on a cylindrical island.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 279-85.

1-03272 — MILLER (D.H.). and HOWELL (W.E.). **Some measurements of ablation, melting, and solar absorption on a glacier in Peru.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 339-40.

1-03273 — MAJOR (G.). **D-Layer ionospheric echoes at Macquarie island.** *Nature, London* (1955), 175, No. 4463, 862-3.

1-03274 — MANDELBAUM (H.). **Wind-generated ocean currents amrum bank light ship.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 1, 72-86.

1-03275 — NASH (J.E.). and FARRELL (J.P.). **A graphical solution of the flood-routing equation for linear storage-discharge relation.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 319-20.

1-03276 — PIKITAKE (T.). **Electrical conductivity of the earth's core.** *Ann. Geophys.* (1955), 2, No. 1 95-7.

1-03277 — PECKER (J.) et REGEMORTER (H.V.). **La largeur équivalente des raies dans l'hypothèse d'un modèle Schuster-Schwarzschild.** *C.R. Acad. Sci., Paris.* (1955), 240, No. 19, 1857-9.

1-03278 — RUNGORN (S.K.) et TOZER (D.C.). **The electrical conductivity of olivine at high temperatures and pressures.** *Ann. Geophys.* (1955), 2, No. 1, 98-102.

1-03279 — RUNCORN (S.K.). **Core motions and reversals of the geomagnetic field.** *Ann. Géophys.* (1955), 2, No. 1, 73-9.

1-03280 — RUNCORN (S.K.). **Recent progress in the theory of the main geomagnetic field.** *Sci. Progr.* (1955), 43, No. 169, 13-27.

1-03281 — RUNCORN (S.K.). **Rock magnetism - Geophysical aspects.** *Advanc. Phys.* (1955), 4, No. 14, 244-89.

1-03282 — RUNCORN (S.K.). **Terrestrial magnetism and electricity. The electrical conductivity of the earth's mantle.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 191-8.

1-03283 — REMSON (I.) and LANG (S.M.). **A pumping-test method for the determination of specific yield;** *Trans. Amer. Geophys Un.* (1955), 36, No. 2, 321-5.

1-03284 — REMSON (I.) and FOX (G.S.). **Capillary losses from ground water.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 304-11.

1-03285 — REVELLE (R.) et MUNK (W.). **Evidence from the rotation of the earth.** *Ann. Géophys.* (1955), 2, No. 1, 104-8.

1-03286 — RATTRAY (M.) and LINCOLN (J.H.). **Operating characteristics of an oceanographic model of Puget sound.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 251-61.

1-03287 — SHOR (G.G.). **Deep reflections from southern California blasts.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 1, 133-8.

1-03288 — SIBUL (O.). **Flow over reefs and structures by wave action.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 1, 61-8.

1-03289 — STOLL (A.M.) and HARDY (J.D.). **Thermal radiation measurements in summer and winter Alaskan climates.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 213-7.

1-03290 — SILLANS (R.). **A propos de la conception classique du processus saisonnier du régime climatique subéquatorial.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 7, 802-3.

1-03291 — SCHOOLEY (A.H.). **Curvature distributions of wind-created water waves.** *Trans. Amer. Feophys. Un.* (1955), 36, No. 2, 273-8.

1-03292 — SCHONSTEDT (E.O.) and IRONS (H.R.). **No. 1 vector airborne magnetometer type 2A.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 1, 25-41.

1–03293 — TQYLOR (W.B.). **Earthquake distribution in the central and southern New Zealand regions.** *N.Z.J. Sci., Tech. (Sect. B.)* (1955), 36, No. 3, 347-50.

1–03294 — UREY (H.C.). **Distribution of elements in the meteorites and the earth and the origin of heat in the earth's core.** *Ann. Géophys.* (1955), 2, No. 1, 65.

1–03295 — VESTINE (E.H.). **Relations between fluctuations in the earth's rotation, the variation of latitude, and geomagnetism.** *Ann. Geophys.* (1955), 2, No. 1, 103.

1–03296 — WOOLLARD (G.P.), HARDING (N.C.) and ROSE (J.C.). **The problem of calibrating high-range geodetic-type gravimeters.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 1, 12-24.

1–03297 — WORZEL (J.L.), SHUBERT (G.L.) and EWING (M.). **Gravity measurements at sea,** 1950-1951. *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 335-8.

1–03298 — WORZEL (J.L.), SHURBET (G.L.) and EWING (M.). **Gravity measurements at sea.** 1952-1953. *Trans. Amer. Geophys. Un.* (1955), 37, No. 2, 326-34.

1–03299 — WOODRUFF (N.P.) and ZINGG (A.W.). **A comparative analysis of wind-tunnel and atomospheric air-flow patterns about single and successive barriers.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 203-9.

1–03300 — WEISS (A.A.). **Radio echo observations of meteors in the southern hemisphere.** *Aust. J. Phys.* (1955), 8, No. 1, 148-66.

D. Pure and Applied Physics

D1. UNITS, GENERAL TECHNICS AND APPARATUS

1-03300 — ALEXANDER (K.M.). **A micrometer method for determining length changes of specimens in sealed containers.** *Aust. J. Appl. Sci.*, (1955), 6, No. 1, 41-5.

1-03301 — BERMAN (M.), LAUGHLIN (J.), YONEMITSU (M.) and VACIRCA (S.). **Automatic isodose recorder.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 328-32.

1-03302 — BICKEL (E.). **Remarks on the proposal by Dr. Galloway concerning the nomenclature of cutting edge geometry.** *Microtecnic* (1955), 9, No. 1, 25-6.

1-03303 — BOERDIJK (A.H.). **Instrument for the direct measurement of angles in the field of view of the naked eye.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 382-3.

1-03304 — BOWERS (R.) and LONG (E.A.). **Microbalance assembly for adsorption studies at low temperature.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 337-40.

1-03305 — BROWN (F.) and LUPTON (T.C.). **Possible danger using tinned leads in mercury contact wells.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 397-.

1-03306 — BURR (E.J.). **Sharpening of observational data in two dimensions.** *Aust. J. Phys.* (1955), 8, No. 1, 30-53.

1-03307 — CHILDS (B.G.) and PENFOLD (J.). **Automatic vacuum pump control circuit.** *Rev. Sci. Instrum.* (1955), 26, No. 2, 235.

1-03308 — DUPUIS (R.). **Nouveau dispositif de micro-projection a l'aide d'un microscope.** *Mikrochim. Acta.* (1955), No. 1, 49-54.

1-03309 — GALLOWAY (D.F.). **Nomenclature for single points tools and twist drills.** *Microtechnic* (1955), 9, No. 1, 21-4.

1-03310 — GEIGER (F.E.). **Low-temperature absorption cell for the cary recording spectrometer.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 383-4.

1-03311 — HARROWER (G.A.), BEST (F.S.) and MACHALETT (A.A.). **Shielded electrical connection into vacuum.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 404-5.

1-03312 — LATWYLER (G.). **Methode nouvelle et rapide pour obtenir l'échelle de la turbulence avec l'anémomètre à deux fils chauds.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 12, 1312-3.

1-03313 — MAUDUIT (A.) et BRYLINSKI (E.). **Sur la rationalisation du système Giorgi.** *Rev. Gen. Elect.* (1955), 64, No. 1, 44-50.

1-03314 — MORRISSON (T.E.), ZAPAS (L.J.) and DEWITT (T.W.). **Apparatus for low-frequency dynamic measurement on polymeric systems** *Rev. Sci. Instrum.* (1955), 26, No. 4, 357-9.

1-03315 — MUNSON (R.J.). **Production of small holes in glass.** *Rev. Sci. Instrum.* (1955), 26, No. 2, 236-7.

1-03316 — NORTON (F.J.). **Vacuum tube opener.** *Rev. Sci. Instrum.* (1955), 26, No. 2, 238.

1-03317 — OPITZ (H.). **Surface finish, dimensional accuracy and alteration in structure of workpieces machined by electric methods.** *Microtecnic* (1955), 9, No. 1, 14-20.

1-03318 — PARKINSON (R.W.). **Instrumentation for the continuous measurement of certain ionospheric echo characteristics** *Rev. Sci. Instrum.* (1955), 26, No. 4, 319-23.

1-03319 — PESANTE (M.). **A new instrument for measuring surface roughness.** *Microtecnic* (1955), 9, No. 1, 27-31.

1-03320 — ROBERT (O.). **Les décisions de la dixième conférence générale des poids et mesures et du Comité international des poids et mesures.** *Rev. Gen. M ,can.* (1955), 39, No. 74, 59-64.

1-03321 — SAVINSKY (K.A.). **In Russian.** (Distribution and concentration of the pumped gas in a steam-jet vacuum pump). *J. Tech. Phys. Moscow.* (1955), 25, No. 4, 720-5.

1-03322 — SHAW (W.C.). **Micro-forceps for handling very small specimens.** *Rev. Sci. Instrum.* (1955), 26, No. 2, 238.

1-03323 — SKARSVAG (K.). **Method of recording the decay of phosphorescence.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 397-8.

1-03324 — SWIRE (B.E.). **A proposed modification to the C.S.I.R.O. Mark I computer.** *Aust. J. Phys.* 8, No. 1, 184-6.

1-03325 — TEN HORN (B.L.). **Chip control in carbide turning.** *Microtecnic* (1955), 9, No. 1, 1-9.

1-03326 — TORNEBOHM (H.). **How to avoid increase of heat in machine tools when using hydraulic motions Microtecnic** (1955), *Microtecnic.* (1955), 9, No. 1, 10-3.

1-03327 — VASILIEV (D.M.) and VASCHENKO (Z.A.). **In Russian.** (A method of determination of small variations of the distance between two surfaces). *J. Tech. Phys., Moscow,* (1955), 25, No. 4, 765-7.

1-03328 — VERNOTTE (P.). **Le lissage des lois expérimentales non formulées.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 19, 1866-8.

1-03329 — VOLET (CH.). **The tenth conference on weights and measures.** *Microtecnic* (1955), 9, No. 1, 36-9.

1-03330 — WHEELER (R.G.) and PLASKON (S.J.). **Subminiature coaxial cables and connectors for use at low temperatures.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 404.

1-03331 — WILLIAMSON (D.). **A precistion dynamic balancer.** *Electron. Engng.* (1955), 27, No. 324, 53-9.

D2. RELATIVITY, ONDULATORY MECHANICS, QUANTIC THEORIES.

1-03332 — ARJANYKH (I.S.). **In Russian.** (Representation of an electromagnetic field with retarding potentials). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1053-6.

1-03333 — AYANT (Y.). **Fonction de corrélation d'une variable quantique.** *J. Phys. Radium* (1955), 16, No. 5, 411-6.

1-03334 — BAYET (M.). DELCROIX (J.-L.). et DENISSE (J.F.). **A propos de la théorie cinétique des plasmas homogènes.** *J. Phys. Radium* (1955), 16, No. 5, 431.

1-03335 — BAYET (M.), DELCROIX (J.-L.) et DENISSE (J-F.). **Théorie cinétique des plasmas homogènes faiblement ionisés. II.** *J. Phys. Radium*, (1955), 16, No. 4, 274-80.

1-03336 — BERTHE (G.). **Sur la symétrie sphérique d'un tenseur de rang 2.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 12, 1313-4.

1-03337 — BOGOLYUBOV (N.N.) and ZUBAREV (D.N.). **In Russian.** (The wave-function of the lower state of a system of interacting Bose-particles). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 129-39.

1-03338 — BRILLOUET (G.). **Ondes liquides de gravité abordant une plage inclinée sur l'horizon de l'angle. $a=\pi/2\ q$, (q entier),** *C.R. Acad. Sci., Paris*, (1955), 240, No. 11, 1189-91.

1-03339 — BRINKMAN (H.C.) and PEPERZAK (B.). **Approximate solutions of the Thomas-Fermi equation for molecules. II.** *Physican.* (1955), 21, No. 1, 48-52.

1-03340 — CADE (R.). **An electrostatic problem in volving a non-linear fluid dielectric.** *Proc. Phys. Soc. London. B.* (1955), 68, No. 1, 1-9.

1-03341 — COFFMAN (M.L.). **Transformation useful in computing vibrational overlap integrals.** *J. Chem. Phys.* (1955), 23, No. 3, 585-6.

1-03342 — COHEN (L.). **A variation-perturbation method. I.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 419-24.

1-03343 — CHEN (L.).. **A variation-perturbation method. II.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 425-32.

1-03344 — DERFLER (H.). **An electromagnetic difference-equation of importance in the theory of travelling wave tubes.** *Z. Angew. Math. Phys.* (1955), 6, No. 2, 104-14.

1-03345 — DESTOUCHES (J.L.). **L'onde u et le fluide associé dans la théorie de la double solution de M. Louis de Broglie.** *J. Phys. Radium* (1955), 16, No. 2, 81-5.

1-03346 — DESTOUCHES (J.L.). **Sur la compatibilité de certaines hypothèses de la théorie de la double solution de M. Louis de Broglie.** *J. Phys. Radium.* (1955), 16, No. 2, 86-91.

1-03347 — DURAND (E.). **L'hypothèse de la polarisation du vide en électromagnétisme classique.** *J. Phys. Radium* (1955), 16, No. 4, 262-70.

1-03348 — FER (F.). **Construction d'une solution à singularité de l'équation $\square$ u–ku=o.** *C.R. Acad.Sci., Paris.* (1955), 240, No. 19, 1191-2.

1-03349 — FER (F.). **Forme générale des solutions singulières des équations d'onde.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 6, 600-2.

1-03350 — FLINT (H.T.). and WILLIAMSON (E.M.). **A note on the relativistic cut-off.** *Proc. Phys. Soc. Lond. A*, (1955), 68, No. 4, 354-5.

1-03351 — FISCHER (N.Z.). **In Russian.** (The stability of a homogeneous phase. I. General theory). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 171-80.

1-03352 — FRADKIN (E.S.). **In Russian.** (The problem of the interaction of two quantum fields). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 5, 897-900.

1-03353 — GELFAND (I.M.) and GRAEV (M.I.). **In Russian.** (Traces of unitary representations of the material unimodular group). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1037-40.

1-03354 — GOLFAND (Yu.A.). **In Russian.** (The building up of the function of propagation by the method of the quasi-fields). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 140-50.

1-03355 — HARTREE (D.R.). **Approximate wave functions, with exchange for Mn+2.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 126-30.

1-03356 — HEINS (A.E.). and SILVER (S.). **The edge conditions and field representation theorems in the theory of electromagnetic diffraction.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 149-61.

1-03357 — HOLOIEN (E.). **Note on a search for simple analytic wave functions for configurations (1s) (2s) in atoms and ions from he to c.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 4, 297-303.

1-03358 — HOOYMAN (G.J.) and GROOT (S.R.). **Phenomenological equations and Onsager relations.** *Physican.* (1955), 21, No. 1, 73-6.

1-03359 — HUPER (C.G.). **Note on Ehrenfest's equations.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 243-4.

1-03360 — INFELD (L.). and FLEBAUSKI (J.). **Unitary transformations and spinor calculus.** *Bull. Acad. Polonaise. Sci.* (1955), 3, No. 2, 95-100.

1-03361 — JANCEL (R.). **Sur l'hypothèse fondamentale de la mécanique statistique quantique.** *C.R. Acad. Sci. Paris.* (1955), 240, No. 19, 1864-6.

1-03362 — JANCEL (R.). **Sur la théorie ergodique en mécanique quantique.** *C.R. Acad. Sci., Paris* (1955), 240, No. 17, 1693-5.

1-03363 — JANCEL (R.). et KAHAN (T.). **Théorie du couplage des ondes électromagnétiques ordinaire et extraordinaire dans un plasma inhomogène et anisotrope et conditions de réflexion. Applications à l'ionosphère.** *J. Phys. Radium*, (1955), 16, No. 2, 136-44.

1-03364 — JANCOVICI (B.). **Sur la dilatation de la couches de ^{16}O.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 15, 1608-10.

1-03365 — JEAN (M.). **Notes sur la théorie du couplage intermédiaire.** *J. Phys. Radium*, (1955), 16, No. 1, 75-7.

1-03366 — KESSLER (P.). **Applications d'une méthode de calcul approché du terme du second ordre en théorie des perturbations.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 12, 1314-7.

1-03367 — KLUITENBERG (G.A.) and DE GROOT (S.R.). **Relativistic thermodynamics of irreversible processes. IV. Systems with polarization and magnetization in an electromagnetic field.** *Physica.* (1955), 21, No. 3, 148-68.

1-03368 — KLUITENBER (G.A.) and DE GROOT (S.R.). **Relativistic thermodynamics of irreversible prousses. V. The energy-momentum tensor of the macroscopic electromagnetic field, the macroscopic forces acting on matter and the first and second laws of thermodynamics.** *Physica.* (1955), 21, No. 3, 169-92.

1-03369 — KOLESNIKOV (N.N.) and LARIN (S.I.) **In Russian.** (The probability of a spontaneous fission and the *B*-stability). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 244-5.

1-03370 — LANDE (A.). **Le principe de continuité et la théorie des quanta.** *J. Phys. Radium*, (1955), 16, No. 5, 353-6.

1-03371 — LUDFORD (G.S.S.), MARTINEK (J.) and YEH (G.C.K.). **The sphere theorem in potential theory.** *Proc.Camb. Phil. Soc.* (1955), 51, No. 2, 389-93.

1-03372 — MARIOT (L.). **Le champ électromagnétique singulier.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 19, 1189-91.

1-03373 — MARSHAK (R.). **Irdépendance de charge en physique nucléaire.** *J. Phys. Radium*, (1955), 16, No. 4, 325-33.

1-03374 — MARTY (C.), NATAF (R.) et PRENTKI (J.). **Sur le spin de certains noyaux impair-impairs. IV. Généralisations.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 6, 602-3.

1-03375 — McCARTHY (I.E.). **Physical properties of particles obeying generalized statistics.** *Proc. Camb. Phil. Soc.* (1955), 51. No. 1, 131-40.

1-03376 — MERCIER (A.). **Fifty years of the theory of relativity.** *Nature, London* (1955), 175, No. 4465, 919-20.

1-03377 — METZ (A.). **Considérations sur la transformation de Lorentz et le caractère de groupe.** *J. Phys. Radium*, (1955), 16, No. 3, 206-9.

1-03378 — MORRIS (G.R.). **A differential equation for undamped forced non-linear oscillations. I.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 297-312.

1-03379 — POKROVSKY (V.L.). **In Russian.** (The theory of the dipole grating of Onsager). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 501-3.

1-03380 — POLIVANOV (M.K.). **In Russian.** (A new derivation of equations for the Green's function in quantum electrodynamics) *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1061-3.

1-03381 — POLKINGHORNE (J.C.). **Temporally ordered graphs in quantum field theory.** *Proc. Camb. Phil. Soc.* (1955). 51, No. 1, 113-20.

1-03382 — POTIER (R.). **Sur la théorie générale des corpuscules à spin et le problème des énergies propres infinies.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 14, 1512. 4

1-03383 — PRIPOGINE (I.) et BINGEN (R.). **Sur la mécanique statistique des phénomènes irréversibles. IV.** *Physica.* (1955), 21, No. 4, 299-311.

1-03384 — QUAN (Ph.M.). **Les équations du champ pour un schéma fluide champ électromagnétique.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 6, 598-600.

1-03385 — QUAN (Ph.M.). **Le problème de Cauchy relatif à un schéma fluide-champ électromagnétique.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 7, 733-5.

1-03386 — SCHENSTED (G.E.). **Electromagnetic and acoustic scattering by a semi infinite body of revolution.** *J. Appl. Phys.* (1955), 26, No. 3, 306-8.

1-03387 — SOKOLOV (A.A.) and TERNOV (I.M.). **In Russian.** (Quantum theory of the radiating electron. IV.). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 431-6.

1-03388 — SHAW (R.). **Spinor identities.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 234-6.

1-03389 — SIEGEL (K.M.), CRISPIN (J.W.), and SCHENSTED (C.E.). **Electromagnetic and acoustical scattering from a semi-infinite cone.** *J. Appl. Phys.* (1955), 26, No. 3, 309-12.

1-03390 — SPIERS (J.A.). **A proposed notation for quantized angular momenta.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 1, 50-2.

1-03391 — STEPANOV (B.M.). **In Russian.** (The introduction of dynamic variables in the quantum field theory). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 5, 889-92.

1-03392 — TONNELAT (M.A.). **La solution générale des équations d'Einstein Guv;p=o.** *J. Phys. Radium,* (1955), 16, No. 1, 21-38.

1-03393 — TSCHIASSNY (L.T.). **Nets composed of parts of circles for the approximate solution of field problems.** *Aust. J. Phys.* (1955), 8, No. 1, 8-29.

1-03394 — VANHUYSE (V.J.). **On the proper frequencies of terminated corrugated waveguides.** *Physican.* (1955), 21, No. 4, 269-80.

1-03395 — VISCONTI (A.). **Applications à la théorie quantique des champs d'une solution exacte de certaines équations linéaires opératorielles.** *J. Phys. Radium,* (1955), 16, No. 1, 1-15.

1-03396 — WINOGRADZKI (J.). **Sur les équations du champ généralisé d'Einstein-Schrodinger.** *C.R. Acad. Sci., Paris,* (1955), (1955), 240, No. 9, 945-7.

1-03397 — YAKOVLEV (L.G.). **In Russian.** (The velocity of the front wave in non-linear electrodynamics). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 246-8.

1-03398 — ZUBOV (V.I.). **In Russian.** (Theory of Lyapunov's second method of derivation of the general solution in a field of asymptotic stability). *Appl. Math. Mech., Leningr.* (1955), 19, No. 2, 179-210.

D 3. TECHNICS OF ATOMIC PHYSICS

1-03399 — **Portable radiation-shielding materials.** *Nucleonics* (1955), 13, No. 5, 84-6.

1-03400 — ALVAREZ (L.W.), BRADNER (H.), FRANCK (J.V.), GORDON (H.), GOW (J.D.), MARSHALL (L.C.), OPPENHEIMER (F.), PANOFSKY (W.K.H.), RICHMAN (Ch.) and WOODYARD (J.R.). **Berkeley proton linear accelerator.** *Rev. Sci. Instrum.* (1955), 26, No. 2, 111-33.

1-03401 — BARNARTT (S.) and SUN (K.H.). **Using neutrons for remote liquid-level gaging.** *Nucleonics* (1955), 13, No. 5, 47-49.

1-03402 — BASILE (R.) et SCHUHL (C.). **Etalonnage en énergie d'un bétatron de 22 Me V.** *J. Phys. Radium,* (1955), 16, No. 5, 372-7.

1-03403 — BAYMAN (B.F.) and ROSS (M.A.S.). **A nuclear emulsion study of the radioactive decay of actinium X (ra)** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 2, 110-20.

1-03404 — BEAUSSIER (J.). **Sur l'étude au spectromètre de masse des réactions chimiques provoquées par les décharges gazeuses.** *C.R. Acad. Sci., Paris* (1955), 240, No. 21, 2071-3.

1-03405 — BODY (R.L.F.) and MORRIS (D.). **A radio-frequency probe for the mass-spectrometric analysis of ions concentrations.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 1, 1-10.

1-03406 — BUNKIN (F.V.) and KARLOV (N.V.) **In Russian.** (The sensitivity of radiometers. 1.). *J. Tech. Phys., Moscow.* (1955), 25, No. 3, 430-5.

1-03407 — CALULA (M.), JACROT (B.) et NETTER (F.). **Spectre des neutrons de la pile de Saclay.** *J. Phys. Radium,* (1955), 16, No. 3, 232-3.

1-03408 — CARR (D.R.) and KULP (J.L.). **Use of A37 to determine argon behavior in vacuum systems.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 379-81.

1-03409 — CASSEN (B.), CROUGH (T.) and GASS (H.). **Semiconductor fast-neutron dosimeter.** *Nucleonics.* (1955), 13, No. 3, 58-60.

1-03410 — CHURCHILL (J.L.) and EVANS (W.W.). **A scaler for the measurement of half-lives.** *Electron. Engng.* (1955), 27, No. 324, 74-7.

1-03411 — CORK (B.). **Proton linear-accelerator Injector for the vevatron.** *Rev. Sci. Instrum.* (1955), 26, No. 2, 210-19.

1-03512 — COSTRELL (L.). **Precision 5-10 Kv. High-voltage supply.** *Nucleonics* (1955), 13, No. 3, 63-4.

1-03413 — CURTIS (M.L.), HEYD (J.W.), OLT (R.G.) and EICHELBERGER (J.F.). **Absolute alpha counting.** *Nucleonics* (1955), 13, No. 5, 38-41.

1-03414 — DE LABOULAYE (H.) et BARREAU (P.). **Système détecteur à symétrie de révolution pour chambre de Wilson à autocommande interne.** *J. Phys. Radium,* (1955), 16, No. 2, 151-4.

1-03415 — DEVONS (S.), MANNING (G.) and BUNBURY (D. St.P.). **Measurement of *X*-transition lifetimes by recoil methods.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 1, 18-31.

1-03416 — DEVRIES (A.E.). **The enrichment of radio-active isotopes by thermal deffusion.** *Physica,* (1955), 21, No. 2, 124-6.

1-03417 — DICK (L.), POUCHER (R.), PERRIN (N.) et VARTAPETIAN (H.). **Coincidence rapide et spectroscopie γ-γ avec compteur à scintillations INa (Tl), application au 102 Rh(I).** *C.R. Acad. Sci., Paris,* (1955), 240, No. 12, 1335-7.

1-03418 — DURHAM (F.P.). **Radiolytic-gas rubbling improves convective heat transfer in supo.** *Nucleonics* (1955), 13, No. 5, 42-6.

1-03419 — FEUER (I.). **Simple micropipette.** *Nucleonics* (1955), 13, No. 3, 68-9.

1-03420 — FISCHER (J.). **Preparing large-area plastic scintillators.** *Nucleonics* (1955), 13, No. 5, 52-4.

1-03421 — FREMLIN (J.H.) and SPIERS (V.M.). **The break-up of negative ions in the cyclotron.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 398-403.

1-03422 — HARDING (G.N.). **Absolute calibration of neutron counters with Po-*X*-Be.** *Proc. Phys. Soc. Lond. A.* (1955), 68, 52-3.

1-03423 — HARRISON (A.) and WINTERINGHAM (F.P.W.). **Beta counter for scanning paper chromatograms.** *Nucleonics* (1955), 13, No. 3, 64-8.

1-03424 — HERZ (A.J.) and DAVIS (G.). **The caracteristics of tracks in nuclear research emulsions.** *Aust. J. Phys.* (1955), 8, No. 1, 129-35.

1-03425 — HUSAIN (A.). **Electron scattering in photographic emulsions** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 1, 45-9.

1-03426 — HOLLWAY (D.L.). **The determination of electron trajectories in the presence of space charge.** *Aust. J. Phys.* (1955). 8, No. 1, 74-89.

1-03427 — KITCHEN (S.W.). **Linear, transparent beam integrator.** *Rev. Sci. Instrum.* (1955), 26, No. 2, 234-5.

1-03428 — KITTEL (J.H.). **Using a scintillation spectrometer for determining uranium burnup.** *Nucleonics* (1955), 13, No. 3, 70-2.

1-03429 — KOONTZ (P.G.), KEEPIN (G.R.) and ASHLEY (J.E.). **ZnS (Ag) phosphor mixtures for neutron scintillation counting** *Rev. Sci. Instrum.* (1955), 26, No. 4, 352-6.

1-03430 — LIVINGSTON (R.S.) and BOCH (A.L.). **Ornl's design for a power reactor package.** *Nucleonics* (1955), 13, No. 5, 24-7.

1-03431 — LONGCHAMP (J.P.). **Contribution à l'étude méthodologique des émulsions photographiques utilisées en physique nucléaire.** *Ann. Phys. Paris.* (1955), No. 10, 201-58.

1-03432 — LUBITZ (C.R.) and PARKINSON (W.C.). **Nomograph for angular distributions in stripping reactions.** *Rev. Sci. Instrum* (1955), 26, No. 4, 400-1.

1-03433 — MARTIN (D.H.). **Correction factors for cd-covered-foil measurements.** *Nucleonics* (1955), 13, No. 3, 52-3.

1-03434 — MARTIN (J.A.), LIVINGSTON (R.S.), MURRAY (L.) and RANKIN (M.). **Radioisotope production rates in a 22-Mev. cyclotron.** *Nucleonics* (1955), 13, No. 3, 28-32.

1-03435 — OHLGREN (H.A.), LEWIS (J.G.) and WEECH (M.). **Reprocessing reactor fuels.** *Nucleonics* (1955), 13, No. 3, 18-21.

1-03436 — PERSICO (E.). **Le synchrotron et ses problèmes.** *J. Phys. Radium,* (1955), 16, No. 5, 360-5.

1-03437 — PICCIONI (O.), CLARK (D.), COOL (R.), FRIEDLANDER (G.) and KASSNER (D.). **External proton beam of the cosmotron** *Rev. Sci. Instrum.* (1955), 26, 232-3.

1-03438 — POST (R.F.) and SHIREN (N.S.). **Stanford mark II linear accelerator.** *Rev. Sci. Instrum.* (1955), 26, No. 2, 205-9.

1-03439 — PREVOT (F.) et VIENET (R.). **Production d'un faisceau pulsé intense de deutons.** *J. Phys. Radium* (1955), 16, No. 3, 238.

1-03440 — PRICE (T.D.) and HUDSON (P.B.). **Specific-activity determination with beta and UV-photon counter.** *Nucleonics* (1955), 13, No. 3, 54-8.
1-03441 — PRIMAK (W.) and FUCHS (L.H.). **Nitrogen fixation in a nuclear reactor.** *Nucleonics* (1955), 13, No. 3, 38-41.
1-03442 — RABIN (H.) and PRICE (W.E.). **Mapping radiation fields with silveractivated phosphate glass.** *Nucleonics* (1955), 13, No. 3, 33-9.
1-03443 — SEIDEN (J.). **La stabilité des orbites dans le synchrotron à forte convergence.** *Ann. Phys. Paris.* (1955), No. 10, 259-304.
1-03444 — REYNOLDS (M.B.). **Techniques for counting radio-krypton.** *Nucleonics* (1955), 13, No. 5, 54-6.
1-03445 — ROGOZINSKI (A.). **Sur l'emploi d'écrans absorbants au sein de la couche sensible d'une chambre à diffusion.** *J. Phys. Radium*, (1955), 16, No. 2, 166-7.
1-03446 — SCOTT (J.M.C.). **The retardation of alpha particles when capture and loss occur.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 121-5.
1-03447 — SMITH (L.) and DLUCKSTERN (R.L.). **Focusing in linear ion accelerators.** *Rev. Sci. Instrum.* (1955), 26, No. 2, 220-8.
1-03448 — THOMPSON (B.W.). **Portable survey meter for fast and slow neutrons.** *Nucleonics* (1955), 13, No. 3, 44-6.
1-03449 — VIGNERON (L.), GENIN (J.) et CHASTEL (R.). **Influence des liquides hydrophiles sur la gélatine des émulsions photographiques utilisées en physique nucléaire.** *J. Phys. Radium.* (1955), 16, No. 3, 179-81.
1-03450 — WEILL (J.) et BRAFFORT (P.). **Utilisation d'une chambre fixe pour la mesure d'une gamme étendue de puissance dans un réacteur nucléaire.** *J. Phys. Radium.* (1955), 16, No. 2, 155-8.

D 4. NUCLEAR PHYSICS. RADIOACTIVITY

1-03451 — ABRAHAM (G.), COHEN (L.) and ROBERTS (A.S.). **The binding energies of 3H and 4He.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 4, 265-84.
1-03452 — AVIGNON (P.), MICHALOWICZ (A.) et BOUCHEZ (R.). **Etude de la désintégration du 103Pd.** *J. Phys. Radium*, (1955), 16, No. 5, 404-10.
1-03453 — BALANDIN (A.A.) and PONOMAREV (A.A.). **In Russian** (The selective hydrogenation of furano-compounds). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 917-20.
1-03454 — BATCHELOR (R.). **The yield of li(p,n) be neutrons for proton energies between 2 5 and 2 9 mev.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 452-3.
1-03455 — BATES (D.R.). **Charge transfer and ion-atom atom interchange collisions.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 4, 344-6.
1-03456 — BATES (D.R.) and GRIFFING (G.W.). **Inelastic collisions between heavy particles: IV- contribution of double transitions to certain cross sections including that associated with the ionization of hydrogen atoms in fast counters with other hydrogen atoms.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 2, 90-6.
1-03457 — BEDREAG (C.). **Les uranides (93-95) et les trans-curiens (97-100).** *C.R. Acad. Sci., Paris.* (1955), 240, No. 19, 1767-9.
1-03458 — BERTHELOT (A.), COHEN (R.), COTTON (E.), FARAGGI (H.), GRJEBINE (T.), LEVEQUE (A.), NAGGIAR (V.), ROCLAWSKI-CONJEAUD (M.) et SZTEINSZNAIDER (D.). **Evolution de la distribution angulaire des protons 0 16 (d, p) 0 17 au voisinage d'une résonance de capture du deutéron.** *J. Phys. Radium* (1955), 16, No. 4, 241-52.
1-03459 — BLEANEY (B.) and LOW (W.). **Nuclear spins and ratio of magnetic moments of europium 151 and 153** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 1, 55-7.
1-03460 — CHARPAK (G.). **Etude de la capture électronique dans la désintégration du nuclide 22 Na.** *J. Phys. Radium.* (1955), 16, No. 1, 62-5.
1-03461 — CLOK (P.), DANYSZ (M.) and GIERULA (J.). **Possible example of decay of a meson active triton at rest.** *Bull. Acad. Polonaise. Soc.* (1955), 33, No. 1, 25-8.
1-03462 — CREUTZ (E.), JUPNIK (H.), SNYDER (T.) and WIGNER (E.P.). **Effect of temperature on total resonance absorption of neutrons by spheres of uranium oxide.** *J. Appl. Phys.* (1955), 26, No. 3, 271-9.
1-03463 — CREUTZ (E.), JUPNIK (H.), SNYDER (T.) and WIGNER (E.P.). **Review of measurements of the resonance absorption of neutrons by uranium in bulk.** *J. Appl. Phys.* (1955), 26, No. 3, 257-9.
1-03464 — CUER (P.) et JUNG (J.). **Sur les niveaux excités de 7 Li et 8Be mis en évidence dans la désintégration de 9Be par les deutérons de faibles énergies.** *J. Phys. Radium* (1955), 16, No. 5, 385-6.
1-03465 — CUER (P.), MAGNAC-VALETTE (D.) et BAUMANN (G.). **Désintégrations de quelques éléments légers par des tritons étudiées par la méthode photographique.** *C.R. Acad. Sci. Paris.* (1955), 240, No. 19, 1880-2.
1-03466 — CUER (P.), SAMMAN (A.) et COMBE (J.). **Sur la mise en évidence de sous-structures instantanées dans le noyau de carbone vis-à-vis des nucléons énergiques.** *C.R. Acad. Sci., Paris* (1955), 240, No. 14, 1527-9.
1-03467 — CUSSINS (W.D.). **Effects produced by the ionic bombardment of germanium.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 4, 213-22.
1-03468 — DABROWSKI (J.) and SAWICKI (J.). **Note on the 6 Li (n,d) 5He reaction.** *Bull. Acad. Polonaise. Sci.* (1955), 3, No. 2, 91-4.
1-03469 — DANYSZ (M.), GIERULA (J.) and SKRZYPECZAK (E.). **A possible example of decay in flight of a charged hyperon.** *Bull. Acad. Polonaise. Soc.* (1955), 3, No. 1, 21-4.
1-03470 — DAYON (M.I.) **In Russian.** (The determination of the mass of charged particles by scattering and the observation of the residual path in plates placed inside a Wilson's chamber). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 453-4.
1-03471 — DE BIRDE (A.H.). **The effect of radiative corrections on a charged spin 1/2 particle in a constant magetic field** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 4, 316-21.
1-03472 — DEMEUR (M.). **Remarque sur la distribution angulaire dans la réaction (n,p).** *J. Phys. Radium.* (1955), 16, No. 1, 73-4.
1-03473 — D'ESPAGNAT (B.) et PRENTKI (J.). **Remarques sur les états excités à vie moyenne brève et la production des mésons.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 14, 1514.6.
1-03474 — DJELEPOV (V.P.), KAZARINOV (Yy.M.) and FLYAGIN (V.B.) **In Russian.** (The exchange-dispersion of neutrotrons with energies of 380 Mev. on deuterons and the spin-relation of the exchange forces). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 655-8.
1-03475 — DICKSON (J.M.), ROSE (B.) and SALTER (D.C.). **Elastic scattering of polarized protons from complex nuclei.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 361-9.
1-03476 — EMERY (E.W.) and VEALL (N.). **The branching ratios of 86Rb and 42K.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 4, 346-8.
1-03477 — ERDMAN (K.L.). **The angular correlation of annihilation radiation.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 4, 304-11.
1-03478 — FREINBERG (E.L.). **In Russian.** (The impact of rapid nucleons with nuclei). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 241-2.
1-03479 — FELD (B.T.). **High-energy nuclear physics.** *Nucleonics* (1955), 13, No. 5, 34-7.
1-03480 — FRILLEY (M.), ROSENBLUM (S.), VALADARES (M.) et BOUISSIERES (G.). **Sur les rayonnements émis au cours de la transmutation RAc - AcX. II.** *J. Phys. Radium.* (1955), 16, No. 5, 378-84.
1-03481 — GALLAHER (L.J.), WHITTLE (G.H.), BEUN (J.A.), DIDDANS (A.N.), GROTER (C.J.) and STEENLAND (M.J.). **Alignment of Co nuclei. I. Experimental results, determination magnetic moment.** *Physican.* (1955), 21, No. 2, 117-23.
1-03482 — GARRIGUE (H.). **Appareil bétamétre et gammamétre adapté à l'étude des dépots radioactifs recueillis en vol.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 19, 1207-8.
1-03483 — GOOD (I.J.). **The joint distribution for the sizes of the generations in a cascade process.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 240-2.
1-03484 — GORODETZKY (S.), MULLER (T.) et PORT (M.). **Sur la réaction Ne 20 (d,p) Ne 21.** *C.R. Acad. Sci., Paris*, (1955), *C.R. Acad. Sci., Paris*, (1955), 240, No. 17, 1704-7.
1-03485 — GRAY (T.P.), SATCHLER (G.R.). **Angular correlation parameters for oriented nuclei.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 4, 349-51.

1-03486 — GRANT (P.J.), RUTHERGLEN (J.G.), FLACK (F.C.) and HUTCHINSON (G.W.). **Angular distributions and angular correlations in the reaction na (p,) mg.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 369-77.

1-03487 — GREEN (L.L.), SCANLON (J.P.) and WILLMOTT (J.C.). **Angular distributions from (d,n) reactions at 0 86 mev. deuteron energy.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 386-93.

1-03488 — GREENLEES (G.W.). **Excitation functions for the scattering of protons and deuterons by Be and Mg.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 2, 97-103.

1-03489 — GROSHEV (L.V.). **In Russian.** (Captation gamma-rays of heat neutrons and the structure of atomic nuclei). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 651-4.

1-03490 — HARTOGH (Ch.R.D.), GROOT (S.R.) and TOLHOEK (H.A.). **On angular effects in nuclear reactions induced by unpolarized particles.** *Physica.* (1955), 21, No. 4, 281-4.

1-03491 — HEIDMANN (J.). **Sur une théorie de l'origine des rayons cosmiques.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 6, 618-20

1-03492 — HOHR (C.B.O.). **Positronium formation in gases and its pressure dependence.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 4, 342-4.

1-03493 — IHSAN (M.A.). **An investigation of Li (d,n) c nuclear reactions.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 393-8.

1-03494 — JEAN (P.). **Spontaneous polarisation of KH_2PO_4 and KD_2PO_4 crystals versus temperature.** *Physica.* (1955), 21, No. 3, 219-22.

1-03495 — KAINUMA (Y.). **The theory of Kikuchi patterns.** *Acta. Cryst.* (1955), 8, No. 5, 247-57.

1-03496 — KHUTZISHVILI (G.R.). **In Russian.** (The degree of orientation of nuclei). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 496-8.

1-03497 — LAPORTE (M.). **Sur une méthode nouvelle d'étude des phénomènes radioactifs: la Cinénucléographie. Application à la mesure de la période de Radium C .** *C.R. Acad. Sci., Paris,* (1955), 240, No. 21, 2069-70.

1-03498 — LARIN (S.I.) and KOLESNIKOV (N.N.). **In Russian.** (The neutronic infra-shell in the field of the trans-uranic elements) *I. Exp. Theor. Phys.* (1955), 28, No. 2, 243.

1-03499 — LEHMANN (P.) et MILLER (J.). **Etat métastable de période courte dans 99Tc.** *C.R. Acad. Sci., Paris,* (1955), 240. No. 14, 1525-7.

1-03500 — LUBIMOV (V.A.), ELISEEV (G.P.), KOSMACHEVSKY (V.K.) and KOVDA (A.V.). **In Russian.** (The probable ionisation of h-mesons in a gas in the impulse range of 2.10 8-1,2. 10 11 ev/sec.). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 883-6.

1-03501 — MARTY (N.). **Sur le niveau de 113 ke V de 175 Lu.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 9, 963-5.

1-03502 — MESCHERYAKOV (M.G.) and NEGANOV (B.S.). **In Russian.** (The formation of mesons in the reaction p+p—— d+n+ in the range of 510-660 Mev.). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 4, 677-80.

1-03503 — MESCHERYAKOV (M.G.), NEGANOV (B.S.), BOGACHEV (N.P.) and SIDOROV (V.M.). **In Russian.** (The reaction p+p——d+n+ under 460 Mev.). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 4, 673-6.

1-03504 — MITTELMAN (P.S.) and LIEDTKE (R.A.). **Gamma rays from thermal-neutron capture.** *Nucleonics* (1955), 13, No. 5, 50-51.

1-03505 — MOHR (C.B.O.). **The mean free path of slow neutrons in nuclear matter.** *Proc. Phys. Soc. Lond. A.* (1955), No. 4, 340-2.

1-03506 — MOTEFF (J.). **Energy spectrum of gammes from gross fission products.** *Nucleonics* (1955), 13, No. 5, 28-31.

1-03507 — NUSSBAUM (R.H.), WAPSTRA (A.H.), STREK (M.J.) and KROPVELD (R.E.W.). **Gamma rays in the decay of Pd and Ag.** *Physican.* (1955), 21, No. 1, 77-8.

1-03508 — OPIK (U.). **The layer approximation for the treatment of collisions of electrons with atoms.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 377-85.

1-03509 — PATTENDEN (N.J.). **The slow neutron cross section of scandium.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 2, 104-9.

1-03510 — PELSER (J.). **Measurements of the velocity distribution of the neutrons escaping from a thermal nuclear reactor.** *Physica.* (1955), 21, No. 1, 22-8.

1-03511 — PODGURSKAYA (A.V.), KALASHNIKOVA (V.I.). STOLYAROV (G.A.), VOROBIEV (E.D.) and FLEROV (G.N.). **In Russian.** (The spontaneous fission of thorium). *J. Ex. Theor. Phys.* (1955), 28, No. 4, 503-5.

1-03512 — POPPEMA (O.J.), SIEKMAN (J.G.), WAGENINGEN (V.R.) and TOLHOEK (H.A.). **Alignment of Co nuclei. II.: Spin and parity assignments.** *Physica.* (1955), 21, No. 3, 223-32.

1-03513 — POPPEMA (O.J.), STEENLAND (M.J.), BEUN (J.M.) and GROTER (C.J.). **Experiments on oriented Co nuclei.** *Physica.* (1955), 21, No. 3, 233-50.

1-03514 — PUCHEAULT (J.). **Dosimétrie du rayonnement d'un réacteur nucléaire par irradiation de ferrine.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 7, 772-4.

1-03515 — REIFFEL (L.). **Beta-ray-excited low-energy X-ray sources.** *Nucleonics* (1955), 13, No. 3, 22-4.

1-03516 — RITTER (G.J.) and SERIES (G.W.). **Nuclear electric quadrupole moment of potassium** 39. *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 450-1.

1-03517 — ROGER (F.). **Quasi-linéarité de l'énergie de transition B entre radioéléments lourds.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 12, 1338-41.

1-03518 — ROSENBLUM (S.) et TYREN (H.). **Le spectre de vitesse des isotopes du polonium.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 19, 1205-7.

1-03519 — SCHMOUKER (J.), ERDOS (P.), JORDAN (P.) et STOLL (P.). **Réactions (y, a), (y, n a) et (y, t) sur les isotopes** 81 **Br,** 109 **Ag,** 39K et 16 **O.** *J. Phys. Radium.* (1955), 16, No. 3, 169-75.

1-03520 — SEATON (M.J.). **Le calcul approximatif des sections efficaces de photo-ionisation atomique. I. L'emploi des fonctions d'onde hydrogénoides pour les états continus.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 11, 1193.

1-03521 — SEATON (M.J.). **Le calcul approximatif des sections efficaces de photoinisation atomique. II. Une relation entre le défaut quantique et la phase de la fonction d'onde à la limite spectrale** *C.R. Acad. Sci., Paris,* (1955), 240, No. 12, 1317-8.

1-03522 — TOBAILEM (J.). **Mesures précises de périodes radioactives.** *J. Phys. Radium.* (1955), 16, No. 1, 48-53.

1-03523 — SEIDEN (J.) et LURCAT (F.). **La diffusion inélastique des particules accélérées dans un synchrotron.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 21, 2067-9.

1-03524 — SHAW (D.F.). **Scattering of** 14 **mev neutrons by the nuclei** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 1, 43-5.

1-03525 — SITENKO (A.G.) and KAGANOV (M.I.). **In Russian.** (The loss of energy of a charged particle moving in an anisotropic medium). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 4, 681-1.

1-03526 — TOBAILEM (J.). **Mesure de la période du Ra D.** *J. Phys. Radium* (1955), 16, No. 3, 235-6.

1-03527 — TOBAILEM (J.) et ROBERT (J.). **Mesure de la période du ThB (212Pb).** *J. Phys. Radium.* (1955), 16, No. 2, 115-7.

1-03528 — TOBAILEM (J.) et ROBERT (J.). **Période du 204 Th.** *J. Phys. Radium.* (1955), 16, No. 4, 340-1.

1-03529 — TOLHOCK (H.A.). **On the foundation of the collective model of the nucleus.** *Physica.* (1955), 21, No. 1, 1-21.

1-03530 — TYAPKIN (A.A.), KOZODAEV (M.S.) and PROJOSHKIN (Yy.D.). **In Russian.** (The formation of no-mesons by protons with energies of 670 Mev. on the nuclei of different elements). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 4, 689-92.

1-03531 — VALLADAS (G.), TEILLAC (J.), FALK-VAIRANT (P.) et BENOIST (P.). **Corrélations angulaires α- λ et α-rayonnement X dans Io** (230/90**Th.**). *J. Phys. Radium,* (1955), 16, No. 2, 125-35.

1-03532 — VAN ROSSUM (L.). **Sur la détermination de la masse des particules lourdes instables, par photométrie des traces dans les émulsions nucléaires.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 7, 747-9.

1-03533 — WEALE (J.W.). **Alpha-gamma angular correlations and internal conversion measurements in ThCC"and ThC'D.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 1, 35-42.

1-03534 — WERLE (J.). **"Equivalent" potentials for the motion of the nucleon in peeudoscalar fields.** *Bull. Acad. Polonaise.Sci.* (1955), 3, No. 2, 87-90.

1-03535 — YADAV (H.N.). **The nuclear scattering of electrons by uranium.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 4, 348-9.

1-03536 — YUASA (T.) et LABERRIGUE-FROLOW (J.). **Remarque sur la désintégration du 204 TI./81.** *J. Phys. Radium.* (1955), 16, No. 2, 165-6.

1-03537 — YUASA (T.), LABERRIGUE-FROLOW (J.) et FEUVRAIS (L.). **Etude de la désintégration du 204/81 TI.** *J. Phys. Radium,* (1955), 16, No. 1, 39-47.

1-03538 — ZAVOISKY (E.K.) and FANCHENKO (S.D.). **In Russian.** (The study of extra-rapid light processes). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 661-3.

5 D. COSMIC RAYS

1-03539 — BECKER (J.), CHANSON (P.), NAGEOTTE (E.) et TREILLE (P.). **Spectre d'impulsions et excès positif des particules du rayonnement cosmique, à 3650m d'altitude, sous 15 cm de plomb.** *J. Phys. Radium,* (1955), 16, No. 3, 191-8.

1-03540 — BERTIN (J.). **Dilution pulsatoire sur réacteur.** *C.R. Acad. Sci. Paris.* (1955), 240, No. 19, 1855-7.

1-03541 — FOUCHE (V.) et TREMBLEY (J.). **Un nouvel exemple de méson X dans les émulsions photographiques.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 16, 1638-40.

1-03542 — HARDING (J.B.). **The second maxima in the transition curve of cosmic ray showers.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 4, 352-4.

1-03543 — JACKLYN (R.M.) **Cosmic rays and air mass effects at Macquarie island.** *Aust. J. Phys.* (1955), 8, No. 1, 190-2.

1-03544 — JDANOV (A.P.) and FEDOTOV (P.I.). **In Russian.** (The transition effect and the angular distribution for isolated cosmic particles). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 659-60.

1-03545 — KOCHARIAN (N.M.). **In Russian.** (The protonic component of the cosmic radiation at a height of 3200 m. above sealevel). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 160-70.

1-3546 — OFFICER (V.C.) and ECCLES (P.J.). **Observations on the penetrating component of extensive air showers.** *Aust. J. Phys.* (1955), 8, No. 1, 136-47.

1-03547 — VAVILOV (Yu.N.), NIKOLSKY (S.I.) and SARANTZEV (V.P.). **In Russian.** (Spatial distribution of nuclear active particles in the board atmospheric showers of cosmic rays). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 505-6.

6 D. SPECTROSCOPY AND ATOMIC AND MOLECULAR STRUCTURE

1-03548 — ABADIE (P.), CHARBONNIERE (R.), GIDEL (A.), GIRARD (P.) et GUILBOT (A.). **Les spectres d'absorption d'électriques de la cellulose, de l'amidon et de leurs sucres constitutifs.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 18, 1772-4.

1-03549 — ADKINS (J.E.). **A note on the finite plane-strain equations for isotropic incompressible materials.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 363-7.

1-03550 — AMAT (G.), BARCHEWITZ (P.) et GRENIER-BESSON (M.L.). **Etude préliminaire du spectre de N2 O sous grande épaisseur entre 1,5 et 2,5 u.** *J. Phys. Radium,* (1955), 16, No. 1, 16-20.

1-03551 — BOVEY (L.F.H.). **An extension of the analysis of the yttrium spectrum.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 2, 79-81

1-03552 — BRANNEN (D.), HUNT (F.R.), ADLINGTON (R.H.) and NICHOLLS (R.W.). **Application of nuclear coincidence methods to atomic transitions in the wave length range 2000-6000 A.** *Nature, London* (1955), 175, No. 4462, 810-1.

1-03553 — CALLON (P.). **Spectres d'absorption L et niveau d'énergie du néodyme (60) et du samarium (62).** *C.R. Acad. Sci., Paris,* (1955), 240, No. 6, 615-7.

1-03554 — CAYREL (R.). **Théorie de l'effet Stark dans un champ non uniforme. II. — Cas de l'atome d'hydrogène.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 6, 603-5.

1-03555 — DEKLEVA (J.) and PETERLIN (A.). **Improved resolving power of the rf mass spectrometer by changing the signal shape.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 399.

1-03556 — CHEPUR (D.V.) and TZVELYKH (N.G.). **In Russian.** (Polarization properties of spectral instruments). *J. Tech. Phys., Moscow,* (1955), 25, No. 3, 416-20.

1-03557 — COULON (R.), ROBIN (J.) et VODAR (B.). **Etude du spectre infrarouge des mélanges de gaz chlorhydrique et d'hydrogène comprimés et apparition d'une fréquence de combinaison entre ClH et H.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 9, 956-8.

1-03558 — COULON (R.). **Aménagement d'un spectromètre infrarouge Perkin-Elmer pour utilisation de cuves longues de faible ouverture.** *J. Phys. Radium,* (1955), 16, No. 4, 343-4.

1-03559 — GILES (A.). **Absorption de la vapeur d'eau lourde dans l'utraviolet de Schumann.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 14, 1523-5.

1-03560 — GEISSE (V.). **Etude théorique relative aux notions d'insensité et largeur de raies d'absorption.** *Ann. Phys. Paris,* (1955), No. 10, 185-200.

1-03561 — GLAUBERMAN (A.E.). **In Russian.** (The theory of the electronic spectra of condensed systems). *C.R.Acad. Sci., U.R.S.S.* (1955), 100, No. 3, 449-52.

1-03562 — GROVE (F.J.) and JELLYMAN (P.E.). **The infra-red transmission of glass in the range room temperature to 1400-.** *J. Soc. Glass Tech.* (1955), 39, No. 186- 3-15.

1-03563 — DE BOER (J.) and COHEN (E.G.D.). **Influence of symmetry effects on the thermal excitations of liquid He and He.** *Physica.* (1955), 21, No. 1, 79-80.

1-03564 — DROUARD (E.). **Etude infrarouge sur l'eau dans le cristal SO_4 Li_2 H_2 O.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 17, 1700-2.

1-03565 — DURAND (E.). **Largeur et courbure des raies en spectrographie de masse.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 19, 1872-4.

1-03566 — IGUGHI (K.). **Les constantes de force de la vibration moléculaire de Si 0_4 $(CH_3)_4$.** *J. Phys. Radium,* (1955), 16, No. 5, 401-3.

1-03567 — HADNI (A.). **Structure des bandes de déformation du dichlorodifluorométhane vers 447 cm-1.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 17, 1702-4.

1-03568 — HERIVEL (J.W.). **The derivation of the equations of motion of an ideal fluid by Hamilton's principle.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 344-9.

1-03569 — HIDALGO (A.). **Spectres d'aborption infrarougre du thiophène et de dérivés mono et disubstitués (attribution des modes de vibration aux bandes enregistées).** *J. Phys. Radium* (1955), 16, No. 5, 366-71.

1-03570 — HINDMARSH (W.R.) and KUHN (H.). **Isotope shifts and hyperfine structure in the atomic spectrum of tin.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 433-61.

1-03571 — JACOB (J.). **The effect of 3p electrons: energy levels of ethylene.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 2, 72-8.

1-03572 — JAFFE (J.H.), WIGGINS (T.A.) and RANK (D.H.). **Extreme resolution of infra-red absorption spectra.** *Nature, London* (1955), 175, No. 4464, 908.

1-03573 — JANSEN (L.) and MAZUR (P.). **On the theory of molecular polarization in gases. I. Effect of molecular interactions on the polarizations of spherical nonpolar molecules.** *Physica.* (1955), 21, No. 3, 193-207.

1-03574 — JASWON (M.A.) and AGHAJANIAN (H.). **The interaction of two excited hydrogen atoms.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 444-6.

1-03575 — JOSIEN (M.L.) et CALAS (R.). **Spectres infrarouges d'esters halogènes et isomérie de rotation.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 16, 1641.2.

1-03576 — KATZENSTEIN (H.S.) and FRIEDLAND (S.S.). **New time of flight mass spectrometer.** *Rev. Sci., Instrum.* (1955), 26, No. 4, 324-7.

1-03577 — KLINKENBERG (P.F.A.). **Analysis of the arc spectrum of lutetium.** *Physica.* (1955), 21, No. 1, 53-62.

1-03578 — KOROSTYLEVA (L.A.), STRIGANOV (A.R.) and YASHIN (N.M.). **In Russian.** (Superfine structure of the spectral lines and the spins of the nuclei of U^{233} and Pu^{239}). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 471-9.

1-03579 — LABERRIGUE-FROLOW (J.) et LEDERER (M.). **Etude des composantes du spectre de $^{86}/_{37}$ Rb.** *J. Phys. Radium,* (1955), 16, No. 4, 346-7.

1-03580 — LAFFITTE (E.). **La polarisation de la fluorescence des molécules gazeuses diatomiques.** *J. Phys. Radium,* (1955), 16, No. 1, 66-71.

1-03581 — LANGEVIN (H.). **Sur les rayonnements accompagnant la désintégration de ^{77}As.** *J. Phys. Radium*, (1955), 16, No. 3, 238-9.

1-03582 — LARIN (S.I.). **In Russian.** (Distribution of the momentum of the quantity of motion in the statistic model of the atom). *J. Exp. Theor. Phys.* (1955)ff 28, No. 4, 498-501.

1-03583 — MAYER (H.). **Sur l'application de la modulation de fréquence à la détermination du facteur de qualité Q des cristaux piézoélectriques.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 6, 612-4.

1-03584 — MURRELL (J.N.) and LONGUET HIGGINS (H.C.). **The electronic spectra of aromatic molecules: III The effect of inductive substituents.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 4, 329-39.

1-03585 — NIKITINE (S.) et SIESKIND (M.). **Contribution à l'étude du dichroisme du spectre de raies de monocristaux de HgI_2.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 12, 1324-6.

1-03586 — OWEN (B.G.). and WILSON (J.G.). **Measurements of the momentum spectrum of mesons at sea level: I. The momentum range 5.10 ev/c-2.10 ev/c.** *Proc. Phys. Soc., Lond. A.* (1955), 68, No. 5, 409-19.

1-03587 — PHILLIPS (O.M.). **The irrotational motion outside a free turbulent boundary.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 220-9.

1-03588 — POPLE (J.A.). **The electronic spectra of aromatic molecules: II. Theoretical treatment of excited states of alternant hydrocarbon molecules based on self-consistent molecular orbitals.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 2, 81-9.

1-03589 — RASKIN (Sh.Sh.). **In Russian.** (The spectra of combined scattering of some molecular compounds containing antimony trichloride). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 3, 485-6.

1-03590 — REID (W.H.). **On the stretching of material lines and surfaces in isotropic turbulence with zero fourth cumulants.** *Proc. Cb. Phil. Soc.* (1955), 51, No. 2, 350-62.

1-03591 — ROESLER (F.C.) and TWYMAN (W.A.). **An iteration method for the determination of relaxation spectra.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 2, 87-105.

1-03592 — RUAMPS (J.). **Spectre d'émission de la molécule Cu-Au.** *C.R. Acad. Sci., Paris* (1955), 240, No. 19, 1200. - 2

1-03593 — SAKELLARIDIS (P.). **Emissions au voisinage des discontinuités d'absorption dans la région L des spectres X des terres rares.** *J. Phys. Radium*, (1955), 16, No. 4, 271-3.

1-03594 — SAKELLARIDIS (P.). **Multiplets caratéristiques des terres rares dans leurs spectres d'émission X.** *J. Phys. Radium*, (1955), 16, No. 5, 422-7.

1-03595 — SHIGORIN (D.N.) and DOKUNIKHIN (N.S.). **In Russian.** (The manifestation of the hydrogen bond in the vibration and electronic spectra of amino-substituted derivatives of anthraquinone). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 4, 745-8.

1-03596 — STEEL (W.H.). **A general equation for the choice of glass for cemented doublets.** *Aust. J. Phys.* (1955), 8, No. 1, 68-73.

1-03597 — STEWART (D.T.). **Electron excitation functions of infra-red nitrogen spectra.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 5, 404-9.

1-03598 — STEKHANOV (A.I.). **In Russian.** (The dependance of the intensity of the spectrum of combinational dispersion of a gypsum crystal). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 4, 685-8.

1-03599 — STREWARTSON (K.). **On the motion of a flat plate at high speed in a viscous compressible fluid. I. Impulsive motion.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 202-19.

1-03600 — STRIGANOV (A.R.), KOROSTYLEVA (L.A.) and DONTZOV (Yu.P.). **In Russian.** (Isotopic displacement in the spectrum of plutonium). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 480-4.

1-03601 — THEUS (R.B.), BEACH (L.A.), and FAUST (W.R.). **Analysis of scintillation spectrometer observations of the penetration of Cs gamma radiation through water.** *J. Appl. Phys.* (1955), 26, No. 3, 294-6.

1-03602 — TRICHE (H.) et SIMON (J.). **Influence de l'état physicochimique d'un élément sur son spectre optique: cas du ferrosilicium et du ferrobore.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 21, 2064-6.

1-03603 — TZYUNAITIS (G.K.) and YUTZIS (A.P.). **In Russian.** (Two-configurational approximation for the two lower configurations of the boron atom). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 452-7.

1-03604 — VAN DEN BERG (C.B.) and BRINKMAN (H.). **High luminosity spectrometry in the soft X-ray region I. The cylinder spectrometer.** *Physica.* (1955), 2L, No. 2, 85-102.

1-03605 — VASSY (A.). **Etude dans le temps du spectre d'émission d'étincelles de grande longueur.** *J. Phys.Radium*, (1955), 16, No. 4, 292-5.

1-03606 — VON BARANOFF (A.). **Sur la résistance d'un corps de révolution effilé en mouvement accéléré ou décéléré.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 6, 591-3.

1-03607 — WELLS (F.W.) and ROOF (J.G.). **Pressure vessel with internal window.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 403-4.

1-03608 — WENIGER (S.). et HERMAN (R.). **Elargissement des raies NaI sous l'influence de l'effet Stark intermoléculaire.** *C.R. Acad. Sci., Paris.* (1955), 240, No. 19, 1876-8.

1-03609 — WINGER (E.P.), CREUTZ (E.), JUPIK (H.) and SNYDER (T.) **Resonance absorption of neutrons by spheres.** *J. Appl. Phys.* (1955), 26, No. 3, 260-70.

D 7. MECHANIC. SOLIDS AND FLUIDS

1-03612 — BARENBLATT (G.I.). **In Russian.** (Motion of suspended particles inside a turbulent flow. occupying a hemi-space or a flat open canal of finite depth). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 61-88.

1-03613 — BARTENEV (G.M.) and GALIL-OGLU (F.A.). **In Russian.** (The dynamic fatigue and the mechanism of the destruction of rubber submitted to repeated deformations). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 377-80.

1-03614 — BELOTZERKOVSKY (S.M.). **In Russian.** (Horseshoe vortex in irregular movement). *Appl. Match. Mech., Leningr.* (1955), 19, No. 2, 159-64.

1-03615 — BELYAKOVA (V.K.). **In Russian.** (Irregular flow of underground water towards horizontal drains). *Appl. Math. Mech., Leningr.* (1955), 19, No. 2, 234-9.

1-03616 — BERGER (J.). **Etude du film d'injection pariétale.** *C.R. Acad. Sci., Paris.* (1955), 240, No. 14, 1510-1.

1-03617 — BEVAN (F.A.T.). **Some aspects of V.H.F. sound broadcasting and F.M. broadcast stations.** *Electron. Engng.* (1955), 27, No. 325, 96-101.

1-03618 — BOTTEMA (C.). **On the stability of the equilibrium of a linear mechanical system.** *Z. Angew. Math. Phys.* (1955), 6, No. 2, 97-103.

1-03619 — BRADISTILOV (G.). **In Russian.** (State of a system composed of three respectively connected mathematical pendulums placed in the same plane, during its periodical movement about the state of stable equilibrium). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 113-8.

1-03620 — BRILLOUET (G.). **Ondes liquides de gravité abordant une plage inclinée sur l'horizon.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 12, 1310-2.

1-03621 — BRUN (E.) et BERGER (J.). **Constitution de la couche limite dans le cas d'une injection pariétale.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 19, 1853-5.

1-03622 — BURDAKOVA (Yu.P.) and DRUJININ (V.V.) **In Russian.** (Dependence of coercive force on the thickness of sheets of the iron-silicon alloy). *J. Tech. Phys., Moscow.* (1955), 25, No. 1, 108-11.

1-03623 — CHANDRASEKHAR (S.). **The character of the equilibrium of an incompressible heavy viscous fluid of variable density.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 162-78.

1-03624 — CHANDRASEKHAR (S.). **The character of the equilibrium of an incompressible fluid sphere of variable density and viscosity subjet to radial acceleration.** *Quart. J. Mech.* (1955), 8, No. 1, 1-21.

1-03625 — CHECHULIN (B.B.). **In Russian.** (Brittleness of metals and the scale effect). *J. Tech. Phys., Moscow.* (1955), 25, No. 1, 125-34.

1-03626 — CHERNY (G.G.). **In Russian.** (Boundary layer to the surface of rupture. Flow of a liquid around a plate with leakage through its surface). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 5, 867-70.

1–03627 — CLARION (C.). **Oscillations de rotation amorties d'une sphère dans un fluide visqueux.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 21, 2049-51.

1–03628 — CLEAVES (H.F.). **The stresses in acolotropic circular disk.** *Quart. J. Mech.* (1955), 8, No. 1, 59.

1–03629 — COLE (J.D.). **Acceleration of slender bodies of revolution through sonic velocity.** *J. Appl. Phys.* (1955), 26, No. 3, 322-7.

1–03630 — DEMCHENKO (O.P.). **In Russian.** (The obtention of frequency characteristics of the systems of automatic regulation with the help of Mikhailov's curves). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 4, 693-96.

1–03631 — DEVIENNE (M.). **Echange d'atomes dans la condensation d'un jet moléculaire.** *C.R. Acad. Sci., Paris* (1955), 240, No. 19, 1202-3.

1–03632 — DROZDOV (Yu.M.). **In Russian.** (Forced vibrations of non-linear systems with one degree of freedom, close to the conservative systems (examples). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 33-40.

1–03633 — DUNCAN (W.J.). **Note on test functions for stability.** *Quart. J. Mech.* (1955), 8, No. 1, 30.

1–03634 — DUPIN (P.). **Un appareil pour la mesure de la vitesse des fluides.** *C.R. Acad. Sci., Paris* (1955), 240, No. 17, 1687.

1–03635 — EL ASSIOUTY (I.M.M.) and PRIEST (M.S.) and BALIGH (A.). **Free-surface instability of liquids in steep channels.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 340-42.

1–03636 — BRICKSEN (J.L.). **Singular surfaces in plasticity.** *J. Math. Phys.* (1955), 24, No. 1, 74-9.

1–03637 — ESCANDE (L.). **Etranglement optimum dans le cas d'une cheminée d'équilibre déversante.** *C.R. Acad. Sci., Paris* (1955), 240, No. 15, 1593–6.

1–03638 — FEINBERG (Ya.B.) and KHIJNYAK (N.A.). **In Russian.** (Artificially anisotropic media). *J. Tech. Phys., Moscow.* (1955), 25, No. 4, 711-9.

1–03639 — FLEURY (J.). **La réalité de "l'effet de puits" en convection naturelle.** *C.R. Acad. Sci., Paris* (1955), 240, No. 19, 1185-7.

1–03640 — GAMTZEMLIDZE (G.A.). **In Russian.** (The experimental checking of the Landau formula for the determination of the coefficient of viscosity of liquids by the method of extinguishing rotary vibrations of a dis). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 3, 441-4.

1–03641 — GREEN (C.D.) and TERHAAR (D.). **Fluctuations in simple mechanical models.** *Physican.* (1955), 21, No. 1, 63-72.

1–03642 — GRUBIN (A.N.) and LICKHACHEV (Yu.I.). **In Russian.** (Analysis of the strained state occuring in the course of large plastic deformations during the stretching of cylindrical samples with ring grooves). *J. Tech. Phys., Moscow* (1955), 25, No. 3, 512-28.

1–03643 — GOUGH (R.H.). **Entrainment and turbulence in open gas streams.** *Proc. Phys. Soc., Lond. B.* (1955), 68, No. 4, 234-40.

1–03645 — GROZDOVSKY (G.L.). **In Russian.** (Flow of a viscous gas between two moving parallel flat walls and between two revolving cylinders). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 99-102.

1–03646 — GOLUBEV (V.V.). **In Russian.** (Theory of wing of small expansion). *Appl. Math. Mech., Leningr.* (1955), 19, No. 2, 143-58.

1–03647 — GUBANOV (A.I.). **In Russian.** (Zone theory of a three-dimensional model of a fluid). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 401-8.

1–03648 — HIDE (R.). **The character of the equilibrium of an incompressible heavy viscous fluid of variable density: an approximate theory.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 1, 179-201.

1–03649 — HILL (N.E.). **Mutual viscosity and diffusion in liquid mixtures.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 4, 209-13.

1–03650 — HUNN (B.A.). **A method of calculating the normal modes of an aircraft.** *Quart. J. Mech.* (1955), 8, No. 1, 38.

1–03651 — JURKOV (S.N.) and TOMASHEVSKY (E.E.). **In Russian.** (Study of the strength of solid bodies. II.). *J. Tech. Phys. Moscow* (1955), 25, No. 1, 66-73.

1–03652 — KATZ (A.M.). **In Russian.** (Forced vibrations of nonlinear systems with one degree of freedom, close to the conservative systems). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 13-32.

1–03653 — KAPITZA (P.L.). **In Russian.** (Hydrodynamic theory of lubrication by rocking). *J. Tech. Phys., Moscow* (1955), 25, No. 4, 747-62.

1–03654 — KEANE (A.). **The gravitational compression of an elastic sphere.** *Aust. J. Phys.* (1955), 8, No. 1, 167-75.

1–03655 — KIEFFER (J.), DAPOIGNY (J.) et VODAR (B.). **Les ondes des choc en milieu dense I. Rappel de quelques considérations théoriques.** *J. Reach.* (1955), No. 30, 137-46.

1–03656 — KISELEV (A.A.). **In Russian.** (The non-stationary flow of viscous liquid under the action of exeternal forces). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 5, 871-4.

1–03657 — KHARLAMOV (P.V.). **In Russian.** (A case of possible integration of movement equations of a rigid body moving in a fluid). *Appl. Math. Mech., Leningr.* (1955), 19, No. 2, 231-3.

1–03658 — KNAPPE (W.). **Hydrodynamisches Modell zur Darstellung von Diffusionsvorgängen mit konzentrationsabhängigen Diffusionskoeffizienten.** (Modèle hydrodinamique des procès des diffusions avec des coeficients de diffusion qui dépendent de la concentration). *Z. Angew. Math. Phys.* (1955), 6, No. 2, 140-3.

1–03659 — KREIMER (G.S.), SAFONOVA (O.S.) and BARANOV (A.I.). **In Russian.** (Strength of the metallic-ceramic hard alloy of tungsten-cobalt carbide in relation to temperature and grain-size). *J. Tech. Phys., Moscow* (1955), 25, No. 1, 117-24.

1–03660 — LANCE (G.N.) and DELAND (E.C.). **On the differential analyser solution of the water bells problem.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 1, 54-5.

1–03661 — LIEBMANN (G.). **Solution of elastic vibration problems with the resistance network analogue.** *Nature, London* (1955), 175, No. 4463, 861-2.

1–03662 — LIKHACHEV (V.A.). **In Russian.** (About A.I. Kalandya's paper "The bending of a rigid plate to the shape of an elliptical ring"). *Appl. Math. Mech., Leningr.* (1955), 19, No. 2, 255-6.

1–03663 — LOMAKIN (V.A.). **In Russian.** (Rigid plastic equilibrium of a sphere in a non-stationary temperature field). *Appl. Math. Mech., Leningr.* (1955), 19, No. 2, 244-8.

1–03664 — LUCAS (R.) et GUELFI (J.). **Sur les pressions de radiation des ondes de viscosité.** *C.R. Acad. Sci., Paris* (1955), 240, No. 18, 1758-9.

1–03665 — MARBOE (E.C.) and WEYL (W.A.). **Atomistic interpretation of the effect of the composition on the viscosity of glass.** *J. Soc. Glass Tech.* (1955), 39, No. 186, 16-36.

1–03666 — MARKHASEV (G.S.). **In Russian.** (Front waves in elastic media with a plane boundary). *Appl. Math. Mech., Leningr* (1955), 19, No. 2, 165-78.

1–03667 — MITRA (D.). **On stresses of an isotropic elastic disc in the form of a cardioid rotating steadily in its plane.** *Z. Angew. Math. phys.* (1955), 6, No. 2, 136-9.

1–03668 — MOSSAKOWSKA (Z.). **Stress functions of elastic bodies with three-dimensional.** *Bull. Acad. Polonaise. Sci.*, (1955), 3, No. 1, 3-6.

1–03669 — MOSSAKOWSKA (J.). **Singular solutions for anisotropic plates.** *Bull. Acad. Polonaise. Sci.* (1955), 3, No. 1, 7-10.

1–03670 — MUSHTARI (A.M.). **In Russian.** (Theory of stability of a spherical sheath submitted to the action of external pressure (in relation to V.I. Fedoseev's paper). *Appl. Math. Mech., Leningr.* (1955), 19, No. 2, 251-4.

1–03671 — NOUGARO (J.). **Méthode graphique pour le calcul de la propagation des intumescences.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 17, 1689-91.

1–03672 — NOWACKI (W.). **Problems of the stability and free vibrations of a cylindrical shell.** *Bull. Acad. Polonaise. Sci.* (1955), 3, No. 1, 11-6.

1–03673 — PETROU (L.). **Etude de la convection forcée et naturelle dans le cas de fils disposés parallèlement au vent.** *C.R. Acad. Sci., Paris* (1955), 240, No. 19, 1187-9.

1–03674 — PLAN (M.). **Fonctionnement d'une prise de pression totale au voisinage d'une paroi dans un écoulement à grande vitesse.** *C.R. Acad. Sci., Paris* (1955), 240, No. 15, 1606-8.

1–03675 — PLAN (M.). **Etude expérimentale de la distribution des vitesses dans une couche limite laminaire compressible.** *C.R. Acad. Sci. Paris* (1955), 240, No. 18, 1759-61.

1–03676 — POSPELOV (B.A.). **In Russian.** (Viscosity of some glasses in the temperature interval between softening and annealing. II. Dependance of the viscosity of glasses on temperature). *J. Phys. Chem., Moscow* (1955), 29, No. 1, 70-5.

1-03677 — ROSTOVTZEV (N.A.). **In Russian.** (The problem of torsion of a rigid hemi-space). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 55-60.

1-03678 — RUMYANTZEV (V.V.). **In Russian.** (Stability of the helical movement of a rigid body in a fluid under S.A. Chaplygin's conditions). *Appl. Math. Mach., Lengingr.* (1955), 19, No. 2, 229-30.

1-03679 — RUMYANTZEV (V.V.). **In Russian.** (Equations of motion of a rigid body containing a cavity filled with a fluid). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 3-12.

1-03680 — SCHUITZE (E.). **Die Erregung reiner Eig enschwingungen von Flugzeugflügeln. Eine Anwendung der Theorie der Integralgle'chungen.** (L'excitation de vibrations propres des ailes d'avion. Une application de la théorie des equations intégrales). *Z. Angew. Math. 2hys.* (1955), 6, No. 2, 126-35.

1-03681 — SHIMANSKY (Yu.I.) and RAVIKOVICH (S.D.). **In Russian.** (The use of the F-scale for the representation of the dependance of the viscosity of liquids on temperature). *J. Phys. Moscow* (1955), 29, No. 1, 48-50.

1-03682 — SHKURENKO (N.S.). **In Russian.** (Experimental study of the possibility of lowering the power in vibrational cutting elements). *J. Tech. Phys., Moscow* (1955), 25, No. 4, 700-6.

1-03683 — SKRIPKIN (V.A.). **In Russian.** (The outflow, approaching sound magnitudes, of a flat gas stream from a nozzle with parallel walls). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 89-98.

1-03684 — STARJINSKY (V.M.). **In Russian.** (A note to the investigation of the stability of periodical movements). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 119-20.

1-03685 — SOLOVIEV (E.G.). **In Russian.** (Round and rectangular wave-carriers with longitudinal diaphragms). *J. Tech. Phys., Moscow* (1955), 25, No. 4, 707-10.

1-03686 — SOKOLOVSKY (V.V.). **In Russian.** (Equations of the theory of plasticity). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 41-54.

1-03687 — SUSSE (C.). **Variation des constantes élastiques du quartz en fonction de la pression jusqu'à 1000 atm.** *J. Phys. Radium.* (1955), 16, No. 4, 348-9.

1-03688 — RIGBY (B.J.). **Stress relaxation of wool fibres in water at strains of 5-20 per cent.** *Aust. J. Phys.* (1955), 8, No. 1, 176-83.

1-03689 — TOMASCHEK (R.). **The serpent spring.** *Nature, London* (1955), No. 4461, 766-7.

1-03690 — VASILIEV (L.I.). **In Russian.** (Dependence of velocity and relaxation coefficients of aluminium on the velocity of plastic deformations). *J. Tech. Phys., Moscow.* (1955), 25, No. 4, 687-90.

1-03691 — VASILIEV (V.A.). **In Russian.** (The shape of the bulge of underground water between two drains, on an impervious ground and in the presence of infiltration). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 106-8.

1-03692 — VORONOVSKAYA (E.V.). **In Russian.** (The modifications of Chaplygin's method for the differential equations of the first order). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 121-6.

1-03693 — WINKLE (P.), DELSING (A.M.G.) and GROTER (C.J.). **Further experiments on mutual friction in liquid helium II.** *Physica.* (1955), 21, No. 4, 312-21.

1-03694 — WINKLE (P.). **Some calculations with the two-fluid model, concerning the flow of liquid helium II.** *Physica.* (1955), 21, No. 4, 322-31.

1-03695 — WINKLE (P.), DELSING (A.M.G.) and POLL (J.D.). **On the existence of critical velocities in liquid helium II.** *Physica.* (1955), 21, No. 4, 332-44.

1-03696 — WILKES (E.W.). **On the stability of a circular tube under end thrust.** *Quart. J. Mech.* (1955), 8, No. 1, 88.

1-03697 — YURIEV (I.M.). **In Russian.** (The design of nozzles). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 103-5.

1-03698 — ZWICK (S.A.) and PLESSET (M.S.). **On the dynamics of small vapor bubbles in liquids.** *J. Math. Phys.* (1955), 33, No. 4, 308-30.

D 8. ACOUSTICS

1-03699 — BLADIER (B.). **De l'influence de la vitesse et de la pression de l'archet sur la vitesse de vibration des cordes filées sur boyau.** *C.R. Acad. Sci., Paris* (1955), 240, No. 19, 1868-71.

1-03700 — BRESSI (A.). **Misure elettroacustiche di modulo elastico** (Mesures electroacoustiques du module élastique). *Alta Frequenza* (1954), 23, No. 2, 51-61.

1-03701 — BORDONI (P.). **Recherches sur l'état solide à haute température effectuées au moyen d'ultrasons.** *J. Phys. Radium.* (1955), 16, No. 4, 285-91.

1-03702 — EUTIZI (S.). **Comportamento del suono in un ambiente con pareti assorbebti** (Comportement du son dans un local avec des murs absorbants). *Alta Frequenza* (1954), 23, No. 1, 3-15.

1-03703 — DOGNON (A.) et SIMONOT (Y.). **Influence de la forme et de la nature du vase d'expérience dans l'action des ultrasons.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 7, 737-9.

1-03704 — DOGNON (A.) et SIMONOT (Y.). **Importance de diverses conditions expérimentales dans l'action des ultrasons.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 6, 608-10.

1-03705 — FAUTFEST (G.W.) and FECHTER (H.R.). **Non saturable high-energy beam monitor.** *Rev. Sci. Instrum.* (1955), 26, No. 2, 229-31.

1-03706 — LACAM (A.). **Variations de la vitesse des ultrasons dans le méthane en fonction de la température et de la pression.** *J. Phys. Radium.* (1955), 16, No. 1, 72-3.

1-03707 — MANSON (N.) et GUENOCHE (H.). **Interprétation de la variation de la célérité des ondes explosives avec le diamètre des charges.** *C.R. Acad. Sci., Paris* (1955), 240, No. 12, 1318-20.

1-03708 — MERLE (M.). **Ondes sonores émises par un jet d'air.** *C.R. Acad. Sci., Paris* (1955), 240, No. 21, 2055-7.

1-03709 — REED (R.D.C.) and McLEOD (T.S.). **Absorption of underwater sound by substances in process of solution.** *Nature, London*, (1955), 175, No. 4462, 809.

D. 9 OPTICS

1-03710 — ABRUKOV (S.A.) and SHAFIGULIN (A.G.). **In Russian.** (The possibility of using interferential effects in Tepler's apparatus for quantitative measurements). *J. Tech. Phys., Moscow* (1955), 25, No. 3, 421-9.

1-03711 — ALENTZEV (M.N.), ANTONOV-ROMANOVSKY (V.V.), STEPANOV (B.I.) and FOK (M.V.) **In Russian.** (The yield of the resonance fluorescence of atoms). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 253-4.

1-03712 — ARNULF (A.). **Lunettes à phosphorescence.** *Rev. Opt. (Theor. Insturm.)* (1955), 34, No. 3, 168-70.

1-03713 — ARPIARIAN (N.). **Sur les sulfures de zinc à luminogène or. Action du fer.** *C.R. Acad. Sci., Paris* (1955), 240, No. 11, 1202-5.

1-03714 — BARRAT (J.P.), BROSSEL (J.) et KASTLER (A.). **Production optique d'une orientation atomique dans la vapeur saturante de sodium.** *C.R. Acad. Sci., Paris* (1955), 240, No. 19, 1196-8.

1-03715 — BAYLE (A.). **Systéme catadioptrique pour l'enregistrement des faibles luminosités et spécialement pour l'exploration du proche infrarouge.** *Rev. Opt. (Theor. Instrum)*, (1955), 34, No. 3, 163-7.

1-03716 — BERNARD (M-Y.). **Détermination précise des éléments cardinaux dans les lentilles à convergence forte.** *C. R. Acad. Sci., Paris* (1955), 240, No. 15, 1612-4.

1-03717 — BERNARD (M-Y.). **Stabilisation latérale du faisceau d'ions dans un accélérateur linéaire par des lentilles à grilles électrostatiques.** *C. R. Acad. Sci., Paris* (1955), 240, No. 16, 1636-8.

1-03718 — BILLARD (P.). **Le papillotage des séquences de trames en télévision.** *Rev. Opt. (Theor. Instrum.).* (1955), 34, No. -3, 129-49.

1-03719 — BLOTTIAU (F.). **Choix des verres achromatisant un objectif visuel mince.** *Rev. Opt. (Theor. Insturm.).* (1955), 34, No. 2, 92-102.

1-03720 — BRACEWELL (R.N.). **A method of correcting the breadening of X-ray line profiles.** *Aust. J. Phys.* (1955), 8, -No. 1, 61-7.

1-03721 — BOUCHEZ (R.), MICHALOWICZ (A.), RIOU (M.). et TEILLAC (J.). **Etude des rayonnements et X émis par l'actinium.** *J. Phys. Radium* (1955), 16, No. 4, 344-5.

1-03722 — BUNKIN (F.B.) and KARLOV (N.V.). **In Russian.** (The sensitivity of radiometers. II.) *J. Tech. Phys., Moscow* (1955), 25, No. 4, 733-41.

1–03723 — CANDLIN (D.J.). **On the identification of x-ray satellites.** *Proc. Phys.-Soc. London A.* (1955), 68, No. 4, 322-8.

1–03724 — CASAL (A.). **Les applications de l'infrarouge dans l'Armée de terre.** *Rev. Opt. (Theor. Insturm.).* (1955), 34, No. 3, 171-8.

1–03725 — CASTAING (R.) et DESCAMPS (J.). **Sur les bases physiques de l'analyse ponctuelle par spectrographie X.** *J. Phys., Radium* (1955), 16, No. 4, 304-16.

1–03726 — CAUCHOIS (Y.). **Les niveaux d'énergie des atomes de numéro atomique inférieur à 70.** *J. Phys., Radium* (1955), 16, No. 4, 253-61.

1–03727 — CHAPELLE (J.) et TAUREL (L.). **Théorie de la diffusion de la lumière par les cristaux fortement piézoélectriques.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 743-5.

1–03728 — DEKLERK (J.) and MUSGRAVE (M. J. P.). **Internal conical refraction of transverse elastic waves in a cubic crystal.** *Proc. Phys. Soc., London, B.* (1955), 68, No. 2, 81-

1–03729 — DEVIOT (B.). **Constantes élastooptiques de PO_4 H_2 (NH_4) et SO_4 Ni, $6H_2$ O.** *J. Phys. Radium,* (1955), 16, No. 2, 162.

1–03730 — DOURNEAU (F.). **Présentation d'un microscope à miroirs.** *Rev. Opt. (Theor. Instrum.),* (1955), 34, No. 1, 43-5.

1–03731 — DUBOULOZ (P.) et RINALDI (R.). **Etude optique de couches minomoléculaires formées par un corps organique absorbant.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1198-200.

1–02732 — DUMBLETON (M.J.). **The infra-red luminescence of solid halogens.** *Proc. Phys. Soc., London. B.* (1955, 68, No. 1, 53-4.

1–03733 — EHRLICH (M.J.) SILVER (S.) and HELD (G.). **Studies of the diffraction of electromagnetic waves by circular apertures and complementary obstacles the near-zone field.** *J. Appl. Phys.,* (1955), 26, No. 3, 336-45.

1–03734 — FINE (S.) and HENDEE (C.F.). **X-ray critical-absorption and emission energies in kev.** *Nucleonics* (1955), 13, No. 3, 36-7.

1–03735 — FRANCON (M.) and POYER (H.). **Microspectrographie.** *Rev. Opt. (Theor. Instrum.),* (1955), 3, No. 1, 25-8.

1–03736 — FRISMAN (E.V.) and TZVETDOV (V.N). **In Russian.** (Dynamical double refraction of polystyrene fractions in toluene and butanone). *J. Tech. Phys., Moscow,* (1955), 25, No. 3, 447-57.

1–03737 — FOURNET (G.). **Théorie des fluides et prévision du rayonnment X diffusé.** *J. Phys., Radium,* (1955), 16, No. 5, 395-400.

1–02738 — FOURNIER (F.). **Note sur les applications militaires des infrarouges.** *Rev. Opt., (Theor. Insturm.),* (1955), 34, No. 3, 179-80.

1–03739 — GALANIN (M.D.). **In Russian.** (Influence of concentration on the luminescence of solutions). *J. Exp. theor. Phys.* (1955), 28, No. 4, 485-95.

1–03740 — GARINO-CANINA (V.). **Sur la nature des centres d'absorption de la silice vitreuse.** *C. R. Acad. Sci. Paris,* (1955), 240, No. 18, 1765-7.

1–03741 — GILVARG (A.B.), DISTLER (G.I.) and MAKAROVA (E.A.). **In Russian.** (Interferential-polarization light filter for the K-line of ionized calcium). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 6, 1067-8.

1–03742 — GOLDMAN (I.). and MIGDAL (A.B.). **In Russian.** (Theory of dispersion in quasi-classical approximation). *J. Exp. Theor. Phys.,* (1955), 28, No. 4, 394-400.

1–03743 — GOLDZAHL (L.) et EBERHARD (PH.). **Diffusion des rayons de 1, 33 Me V par le champ électrique des noyaux.** *C. R. Acad.-Sci., Paris,* (1955), 240, No. 9, 965-8.

1–03744 — GOURCEAUX (M.). **Absorption, réflexion et transmission partielles simultanées d'une onde plane uniforme par une couche mince métallique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 952-3.

1–03745 — HANNES (H.). **Zur Grundstellung des Mach-Zehnder-Interferometers.** (On the basic (neutral) position of the Mach-zehnder interferometer). *Optik, Stuttgart,* (1955), 12, No. 1, 17-22.

1–03746 — HANSEN (G.). **Die Sichtbarkeit der Interferenzen beim Twyman-Interferometer.** (La visibilité des interférences aves l'interféromètre de Twyman. *Optik, Stuttgart.* (1955), 12, No. 1, 5-16.

1–03747 — JANIN (J.) et BERNARD (R.). **Sur les propriétés optiques du méta-antimoniate de calcium.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 614-5.

1–03748 — JOHANNIN-GILES (A.) et JOHANNIN (P.). **Cryostat à température variable.** *J. Phys., Radium,* (1955), 16, No. 2, 162-3.

1–03749 — KOROLEV (F.A.) and KLEMENTIEVA (A. Yu.) **In Russian.** (The optical properties of dielectric mirrors under slanting incidence of light). *C. R. Acad. Sci., U.R.S.S.* (1955), (1955), 100, No. 3, 459-60.

1–03750 — LAGARDE (D.) et DUPEYRAT (R.). **Calculs sur les étalons de Fabry-Pérot et les polyétaions contractés.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 21, 2062-4.

1–03751 — LANSRAUX (G.). **Influence de l'aberration de sphéricité sur la structure des figures de diffraction de révolution.** *Rev. Opt. (Theor. Insturm.).* (1955), 34, No. 2, 65-91.

1–03752 — LAPIERRE (A.B.) and DUMONTET (P.). **La notion de cohérence en Optique.** *Rev. Opt. (Theor. Insturm.),* (1955), 34, No. -1-21.

1–03753 — LAU (E.). **Die Dupligramm-Methode zur Auswertung von Interferogrammen.** (La méthode du dupligramme pour l'evaluation d'interférogrammes.). *Optic, Stuttgrat,* (1955), 12, No., 1, 23-8.

1–03754 — LEVY (M.) and VARLEY (J.H.O.). **Radiation induced colour centres in fused quartz.** *Proc. Phys. Soc., London,* B. (1955), 68, No. 4, 223-34.

1–03755 — LECOMTE (J.). **Rappel des principales méthodes pour la mesure des indices de réfraction.** *Rev. Opt. (Theor. Instrum.).* (1955), 34, No. 3, 150-62.

1–03756 — LENOBLE (J.) et SAINT-GUILLY (B.). **Sur l'absorption du rayonnement ultraviolet par l'eau distillée.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 954-5.

1–03757 — LEVSHIN (L.V.). **In Russian.** (The influence of the concentration on the optical properties of solutions of acridine derivatives). *J. Exp. Theor. Phys.,* (1955), 28, No. 2,-213-22.

1–03758 — LEVSHIN (L.V.). **In Russian.** (The inflluence of the concentration on the optical properties of solutions of 3,6-diaminoacridine). *J. Exp. Theor. Phys.,* (1955), 1955), 28, No. 2, 201-12.

1–03759 — LOWENTHAL (S.). **Dispositif d'observation pour microscope en lumière infrarouge.** *Rev. Opt. (Theor. Instrum.),* (1955), 34, No. 1, 41-2.

1–03760 — MANDE (C.). **Sur les spectres d'absorption L de l'or dans le métal pur et dans les alliages or-palladium.** *C. R. Acad. Sci., Paris,* (1955), 240, No. No. 11, 1205-7.

1–03761 — NOMARSKI (G.). **Microscopie dans l'infrarouge.** *Rev. Opt. (Theor. Instrum.),* (1955), 34, No. 1, 29-37.

1–03762 — PAILLARD (G.). **Contribution à l'étude des solutions de gaz par spectrographie infrarouge.** *J. Phys., Radium* (1955), -16, No. 4, 281-4.

1–03763 — PETRJAK (K.A.) and BAK (M.A.). **In Russian.** (Determination of the fraction of radiation from a round source falling on a circular target). *J. Tech. Phys., Moscow,* (1955), 25, No. 4, 636-43.

1–03764 — PICHT -(J.). **Neue Untersuchungen zur Totalreflexion.** (Nouvelles recherches sur la réflexion totale). *Optik, Stuttgart,* (1955), 12, No. 12 No. 1, 41-55.

1–03765 — PLESSE (H.). **Neue registrierende optische Messgeräte.** (Nouveau montage enregistreur pour les mesures optiques). *Optik, Stuttgart,* (1955), 12, No. 1, 29-40.

1–03766 — POCHON (C.R.). **Les couleurs sous les lampes.** *Bull. Soc. Franc. Elect.* (1955), 5, No. 50, 109-19.

1–03767 — RABINOVITCH (J.) and MARCATAND (J.). **Procédé de détermination des constantes élastiques du verre.** *Rev. Opt. (Theor. Insturm.)* (1955), 34, No. 2, 103-5.

1–03768 — RINALDI (R.) et DUBOULOZ (P.). **Relation entre le coefficient d'absorption et la variation de l'angle de Brewster pour des lames minces formées par un corps absorbant.** *C.R. Acad. Sci. Paris,* (1955), 240, No. 17, 1697-700.

1–03769 — ROZMAN (I.M.). **In Russian.** (The yield of luminiscence of organic scintillators). *J. Exp. Theor. Phys.,* (1955), (1955), 28, No. 2, 251-2.

1–03770 — RODIONOV (S.F.), HAIKIN (M.S.) and SHALNIKOV (A.I.). **In Russian.** (Self-extinguishing light counters). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 223-7.

1-03771 — SCHONLAND (D.S.). **The use of overlapping intervals in multiple scattering measurements.** *Proc. Phys, Soc. Lond. A.* (1955), 68, No. 5, 447-9.
1-03772 — STEEL (W.H.). **Multiple images in reflecting microscopes** *Aust. J. Phys.* (1955), 8, No. 1, 186-89.
1-03773 — TAYLOR (J.) and PARRISH (W.). **Absorption and counting-efficiency data for X-ray detectors.** *Rev. Sci. Instrum.* (1955), 26, No. 4, 367-3.
1-03774 — TOL (T.), OOSTERKAMP (W.J.) and PROPER (J.). **Limits of detail preceptibility in radiology particularly when using the image intensifler.** *Philips. Res. Rep.* (1955), 10, No. 2, 141-57.
1-03775 — VANKAMPEN (N.G.). **Completeness of stationary scattering states I.** *Physica.* (1955), 21, No. 2, 127-36.
1-03776 — VICKERS (A.E.J.). **Optical fused quartz and its contributions to research.** *J. Soc. Glass. Tech.* (1955), 38, No. 186, 48-57.
1-03777 — VOLKENSTEIN (A.A.) and DIKAN (E.I.). **In Russian.** (Photometric measurements by the method of flashing in the field of low luminosities). *C.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 905-8.
1-03778 — WOLFE (R.). **The theory of the reflectivity of metals** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 2, 121-7.

D. 10 THERMODINAMICS. HEAT

1-03779 — BARANOWSKI (B.). **Migration of components of binary liquid thermodynamics of irreversible processes.** *Bull. Acad. Polonaise. Sci.*, (1955), 3, No. 2, 117-20.
1-03780 — BASOV (N.G.) and PROKHOROV (A.M.). **In Russian.** (Possible methods for the obtention of active molecules for a molecular generator). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 249-50.
1-03781 — BERGEON, (R.), CESCHINO (F.), HENNEBUTTE (L.) et VODAR (B.). **Le troisième coéfficient du viriel pour un potentiel intermoléculaire à répulsion exponentielle.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 12, 1320-3.
1-03782 — BIJL (D.) and PULLAN (H.). **A new method for measuring the thermal expansion of solids at low temeratures; the thermal expansion of copper and aluminium and the gruneison rule.** *Physica.* (1955), 31, No. 4, 285-98.
1-03783 — BRUN (E.A.) et PLAN (M.). **Mesures thermiques dans le choc de condensation.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 19, 1183-5.
1-03784 — COCKETT (A.H.). **Use of liquid propane as refrigerant.** *Nature, London* (1955), 175, No. 4461, 780.
1-03785 — COHEN (E.G.), DE BOER (J.) and SALSBURG (Z.W.). **A cell cluster theory for the liquid state II.** *Physica.* 1(1955), 21, No. 3, 137-47.
1-03786 — DAIBOV (A.Z.) and TZIDILKOVSKY (I.M.). **In Russian.** (The Nernst-Ettingshausen effect in tellurium). *J. Tech. Phys., Moscow*, (1955), 25, No. 4, 742-6.
1-03787 — DUCLAUX (J.). **Théorie des gaz. XXI.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 14, 1497-500.
1-03788 — EINSENSCHITZ (R.). **The principle of Carathéodory.** *Sci., Progr.* (1955), 43, No. 170, 246-60.
1-03789 — ESCANDE (L.). **Oscillations provoquées dans une cheminée d'équilibre par une ouverture partielle succèdant à une fermeture complète instantanée.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 7, 701-3.
1-03790 — FAST (J.D.). **Entropy in science and techonology I.** *Philips. Tech. Rev.* (1955), 16, No. 9, 258-69.
1-03791 — FAST (J.D.). **Entropy in science and technology. II.** *Philips. Tech. Rev.* (1955), 16, No. 10, 298-308.
1-03792 — FISHER (I.Z.). **In Russian.** (Stability of a homogeneous phase. II. Determination of the limit of stability). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 437-46.
1-03793 — FISHER (I.Z.). **In Russian.** (Stability of a homogeneous phase. III. Theory of the crystallization curve). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 447-51.
1-03794 — FOKIN (O.V.). **In Russian.** (The change of temperature during the cutting of metals by the method of the natural thermocouple). *J. Tech. Phys., Moscow*, (1955), 25, No. 3, 436-46.
1-03795 — GINSBURG (V.L.) and SHABANSKY (V.P.). **In Russian.** (The kinetic temperature of electrons in metals and the anomalous electronic emission). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 3, 445-8.
1-03796 — GROOT (S.R.). and VAN (K.N.G.). **On the derivation of reciprocal relations between irreversible processes.** *Physica.* (1955), 21, No. 1, 39-47.
1-03797 — GORDOV (A.N.). **In Russian.** (Temperature of an unlimited cylinder in a fluid flowing with pulsating velocity and temperature). *Appl. Math. Mech., Leningr.* (1955), 19, No. 2, 240-3.
1-03798 — HENON (M.). **Calcul du coefficient de compressibilité adiabatique d'un mélange gazeux.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 9, 947-9.
1-03799 — HOSLER (Ch.L.) and HOSLER (C.R.). **An investigation of the freezing of water in capillaries** *Trans. Amer. Geophys. Un.*)1955), 36, No. 1, 126-32.
1-03800 — HOSSZU (M.). **Eine Bemerkung zur Mitteilung von H. Wundt: "Uber eine Funktionalgleichung aus der Wärmeleitung".** (Une observation à la communication de M. H.Wundt" sur une equation fonctionelle de la conduction de la chaleur"). *Z. Angew. Math. Phys.* (1955), 6, No. 2, 143-5.
1-03801 — HUTCHINSON (E.) and MANCHESTER (K.E.). **Semi-micro calorimeter.** *Rev. Sci., Instrum.* (1955), 26, No. 4, 364-6.
1-03802 — JAEGER .(J.C.). **Conduction of heat in solid in contact with a thin layer of a good conductor.** *Quart. J. Mech.* (1955), 8, No. 1, 101.
1-03803 — JOHANNIN-GILLE (A.) et JOHANNIN (P.). **Dispositif de mesure de tensions de vapeur.** *J. Phys. Radium.* (1955), 16, No. 3, 236-7.
1-03804 — JONES (G.O.). **An improved miniature liquefier liquefier-cryostat** *Proc. Phys. Soc., London, B.* (1955), 68, No. 5, 320-1.
1-03805 — KANTER (K.P.). **In Russian.** (A method of instantaneous heat source for the determination of thermal characteristics). *J. Tech. Phys., Moscow.* (1955), 25, No. 3, 472-7.
1-03806 — KHAVKIN (L.P.). **In Russian.** (Measurement of the pressure of different gases with a thermal steam manometer). *J. Tech. Phys., Moscow*, (1955), 25, No. 4. 726-32.
1-03807 — KREITH (F.) and ROMIE (F.E.). **A study of the termal diffsion equation with boundary conditions coresponding to solidification or melting of materials initially at the fusion temperature.** *Proc. Phys. Soc. Soc., London, B.* (1955), 68, No. 5, 277-21.
1-03808 — LANDAU (L.D.) and LIFSCHITZ (D.). **In Russian.** (The rotation of liquid helium). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 669-72.
1-03809 — LAREDO (S.J.) and PIPPARD (A.B.). **Thermal conduction in the intermadiete state of superconductors.** *Proc. Camb. Phil. Soc.*, (1955), 51, No. 3, 368-76.
1-03810 — LAVILLE (G.). **Etalonnage expérimental du microcalorimètre Calvet.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 11, 1195-7.
1-03811 — LECOMTE (J.). **Présentation d'un four et d'un cryostat.** *Rev. Opt. (Theor. Insturm.).* (1955),-34, No. 1, 22-24.
1-03812 — LEVITSKY (M.P.). **In Russian.** (The concept of energy of activation for the solid state of matter). *J. Tech. Phys., Moscow*, (1955), 25, No. 3, 544-5.
1-03813 — LIFSCHITZ (E.M.). **In Russian.** (The action of temperature on the molecular forces of attraction between condensed bodies). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 5, 879-81.
1-03814 — LONAPPAN (M.A.). **Thermal expansion of potassium chlorate.** *Proc. Phys. Scoc. London, B.* (1955), 68, No. 2, 75-8.
1-03815 — MALESINSKI (W.). **Ideal eutectic systems.** *Bull. Acad. Polonaise. Soc.*, (1955), 3, No. 1, 51-4.
1-03816 — MASLOV (P.G.). **In Russian.** (Graphical methods for the determination of the thermodynamical properties of organic compounds). *J. Phys. Chem., Moscow*, (1955), 29, No. 1, 62-9.
1-03817 — MAX TEISSIE-SOLIER, LAGASSE (J.) et SEVELY (Y.). **La détermination des réactances des fuites lors du fonctionnement en charge des machines asynchrones d'induction.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 21, 2061-2.
1-03818 — MAZUR (P.) and JANSEN (L.). **II. Effect of the molecular interactions on the Clausius-Mosotti function for systems of spherical non-polar molecules.** *Phys.* (1955), 21, No. 3, 208-18.

1-03819 — MERCIER (J.). **Considérations sur l'expression du travail en thermodynamique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 605-8.

1-03820 — MIRTOV (B.A.). **In Russian.** (A thermal manometer for the measurement of gas pressures o 50-60 mm. mercury). *J. Tech. Phys., Moscow.* (1955), 25, No. 3, 466-71.

1-03821 — POPOFF (K.). **Thermodynamique des processus irréversibles. Systèmes gazeux. Dissociation de HI, la température et la pression restant constantes.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1192-4.

1-03822 — POPOFF (K.). **Sur la thermodynamique des splutions déliées. Cas de deux composantes en une phase, la température et la pression restant constantes.** *C. R. Acad. Sci., Paris,* (1955) 240, No. 7, 735-7.

1-03823 — ROESLER (F.C.). **Some applications of Fourier series in the numerical treatment of linear behaviour.** *Proc. Phys. Soc. London, B.* (1955), 68, No. 2, 89-96.

1-03824 — RUMER (Yu B.). **In Russian.** (Phase transitions of the second kind in the Bose-gas). *C.R.-Acad. Sci., U.R.S.S.* (1955), 100, No. 5, 887-8.

1-03825 — RYVKIN (S.). and KHARIYUZOV (R.V.). **In Russian.** (A method of determination ofthe mobility of the "non-basic" carriers of current, injected by light. *J. Tech. Phys., Moscow.* (1955), 25, No. 4, 563-8.

1-03826 — RYSKIN (G. Ya.). **In Russian.** (Energy of activation and dependanse of diffusion on temperature in polymers). *J. Tech. Phys., Moscow,* (1955),-25, No. 3, 458-65.

1-03827 — STEPHEN (C.H.). **The symmetry relations for anisotropic heat conduction.** *Phys.* (1955), 21, No. 3, 251-2.

1-03828 — STRATONOVICH (R.L.). **In Russian.** (Entropy of systems with random number of particles). *J.Exp. Theor.* (1955), 28, No. No. 4, 409-21.

1-03829 — SKRIPOV (V.P.) and SEMENTCHENKO (V.K.). **In Russian.** (Phase transitions of the second kind and critical effects. V. Maximum heat capacity in the critical region of separation of double liquid systems). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 174-84.

1-03830 — SRIVASTAVA (R.C.). **Performance of hot wire thermal diffusion columns.** *Proc. Phys. Soc., London, A.* (1955), 68, No. 4, 294-6.

1-03831 — SWIATECKI (W.J.). **The effect of a potential gradieut on the density of a degenerate Fermi gas.** *Proc. Phys. Soc. London, A.* (1955), 68, No. 4, 285-93.

1-03832 — TARASOV (V.V.). **In Russian.** (Chain structures of the sesquioxides of As. Sb, Bi and B and the theory of heat capacity). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 198-202.

1-03833 — TEMKIN (A.G.). **In Russian.** (Theorem of the maximum of temperature gradient). *J. Tech. Phys., Moscow.* (1955), 25, No. 3, 534-40.

1-03834 — TEMKIN (A.G.). **In Russian.** (Influence of the integral criterion of shape on processes of heat conduction). *J. Tech. Phys. Moscow,* (1955), 25, No. 3, 497-511.

1-03835 — TSUJIKAWA (I.) et couture (L.). **Observation optique d'un changement de phase du fluosilicate de manganèse hexahydraté.** *J. Phys. Radium,* (1955), 16, No. 5, 430-1.

1-03836 — VERNOTTE (P.). **Sur la convection naturelle de la chaleur par les fils.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 21, 2057-9

1-03837 — WERTHEIM (B.A.) and OSTROUMOV (G.A.).. **In Russian.** (Making the optical heterogities apparent). *Appl. Math. Mech., Leningr.* (1955), 19, No. 1, 109-12.

1-03838 — WHALLEY (E.). **Thermodynamic properties of argon in the temperature range -100 to 600 C. and pressure range O to 80 atmospheres.** *Ca, ad. J. Technol,* (1955), 33, No. 2, 111-6.

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1-03839 —ALEKSEEVSKY (N.E.), JDANOV (G.S.) and JURAVLEV (N.N.). **In Russian.** (The superconductivity of the compounds Bi_4Rh and Bi_2Rh). *J. Exp. Theor. Phys.,* (1955), 28, No. 2, 237-40.

1-03840 — ASH (E.A.). **Use of space charge in electron optics.** *J. Appl. Phys.* (1955), 26, No. 3, 327-30.

1-03841 — AZBEL (M.Ya.). **In Russian.** (The teory of skin-effect in a constant magnetic field). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 437-40.

1-03842 — BARANOVSKY (S.N.). KAMINSKY (D.L.) and KELMAN (V.M.). **In Russian.** (Study of electron optical pro perties of straight magnetic slits). *J. Tech. Phys., Moscow.* (1955), 25, No. 4, 610-24.

1-03843 — BASTIN (J.A.) and WRIGHT (R.W.). **The electrical conductivity of cadmium oxide at low temperatures.** *Proc. Phys. Soc., London, A.* (1955), 68, No. 4, 312-5.

1-03844 — BATES (L.F.) and SHERRY (N.P.R.). **The heat changes accompanying magnetization processes in ferrites.** *Proc. Phys. Soc., London, B.* (1955), 68, No. 5, 304-9.

1-03845 — BLET (G.). **L'effet photomagnétoélectrique dans les photopiles à couche d'arrêt au sélénium.** *C. R. Acad. Sci., Paris* (1955), 240, No. 7, 743.

1-03846 — BLEANEY (B.) BOGLE (G.S.). COOKE (A.H.) DUFFUS (R.J.) O'BREIN (M.C.M.) and STEVENS (K.W.H.) **Paramagnetism of caesium titanium alum.** *Proc. Phys. Soc. Lond. A.* (1955), 68, No. 1, 57.

1-03847 — BRUIJSTEN (J.). **Graphical determinations of reflex-klystron characteristics.** *Philips. Res. Rep.* (1955),10, No. 2,81-96.

1-03848 — BOLTAKS (B.I.) and TARNOVSKY (N.N.). **In Russian** (Electrical properties of chalcopyrite. Influence of a surface treatment on the rectifying properties of the crystals). *J. Tech. Moscow,* (1955), 25, No. 3, 402-9.

1-03849 — BOLTAKS (B.). **In Russian.** (Diffusion of tin and antimony in the semi-conducting compounds Bi_2Se_3 and Bi_2Te_3). *J. Tech. Phys., Moscow,* (1955), 25, No. 4, 767-8.

1-03850 — BONSCHTEDT (B.E.). **In Russian.** (A method of determination of a broad class of electrostatic and magnetic fields for which the solution of the basic equations of electronic optics is expressed by known functions). *J. Tech. Phys., Moscow.* (1955), 25, No. 3, 541-3.

1-03851 — BONDARENKO (V.V.), KVARTZKHAVA (I.F.), PLYUTTO (A.A.) and CHERNOV (A.A.). **In Russian.** (The resistance of metals under currents of high density). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 191-8.

1-03852 — BOUIX (M.). **Etude du champ électromagnétique au voisinage d'une surface réfléchissante.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 18, 1763-5.

1-03853 — BUKKE (E.E.). **In Russian.** (Change in the dielectric permeability of the phosphors by the action of infra-red light). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 507-8.

1-03854 — CHARTERJEE (J.S.). **Radiation characteristics of a conical helix of low pitch angle.** *J. Appl. Phys.* (1955), 26, No. 3, 331-5.

1-03855 — CHODOROW (M.), GINZTON (E.L.), HANSEN (W. W.), KYHL (R.L.), PANOFSKY (W.K.H.), NEAL (R.B.) and staff. **Stanford high-energy linear electron accelerator (mark III).** *Rev. Sci. Instrum.* (1955). 26, No. 2, 134-204.

1-03856 — CHUIKIN E.I.). **In Russian..** (The relation between electrica and mechanical relaxations in polymers). *J. Tech. Phys., Moscow,* (1955), 25, No. 4, 595-600.

1-02857 — CROFT (G.T.), DONAHOE (F.J.) and LOVE (W.F.). **Automatic recording torsional magnetic susceptibility balance.** *Rev. Sci. Instrum.,* (1955), 26, No. 4, 360-3.

1-03858 — COCHET (R.) et REFFAY (R.). **La mesure des potentiels dans les champs électriques ionisés unipolaires (mobilités des ions dans l'air).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 1516-8.

1-03859 — COLLET (L.H.). **Sur le comportement de la substance de référence dans l'électrolyse de Nernst et l'interprétation nouvelle des expériences de Washburn.** *J. Phys. Radium,* (1955), 16, No. 2, 159-61.

1-03860 — COLLET (L.). **Sur la force électromotrice de filtration.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1889-91.

1-03861 — COMER (J.J.) and TURLEY (J.W.). **Replica studies of bulk clays.** *J. Appl. Phys.* (1955), 26, No. 3, 346-50.

1-03862 — COOKE (A.H.) and DUFFUS (H.J.). **The magnetic susceptibility of potassium manganicyanide.** *Proc. Phys. Soc., London, A.* (1955), 68, No. 1, 32-4.

1-03863 — DES CLOIZEAUX (J.). **Bandes interdites et bandes permises dans les semi-conducteurs impurs et les alliages désordonnés.** *J. Phys., Radium,* (1955), 16, No. 4, 320-4.

1-03864 — DOWLING (J.J.). **Comparison of resistances.** *Rev. Sci. Instrum.*, (1955), 26, No. 2, 233.

1-03865 — DURAND (E.). **Les conditions aux limites pour les milieux magnétiques de perméabilité infinie.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 11, 1197-200.

1-03866 — DU PRE (F.K.). **On the microwave Cotton-Mouton effect in ferroxcube.** *Philips Res. Rep.* (1955), 10, No. 1, 1-10.

1-03867 — ELTON (L.R.B.). **On the infinity in the second Born approximation for the Coulomb field.** *Proc. Camb. Phil. Soc.* (1955), 51, No. 2, 333.

1-03868 — FAIN (V.M.). **In Russian.** (Distribution of electrons according to velocity in the presence of a variable electric field and a constant magnetic field). *J. Exp. Theor. Phys.* (1955),28, No. 4, 422-30.

1-03869 — FRANCOIS (H.) et HOARAU (J.). **Détermination de la susceptibilité magnétique atomique de l'azote dans les amines et les nitriles.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 11, 1220 21.

1-03870 — FLANAGAN (W.F.), FLINN (P.A.) and AVERBACH (B.L.). **Errata : Shorting and field corrections in Hall measurements.** *Rev. Sci. Instrum.* (1955), 26, No. 2, 233-4.

1-03871 — GALKIN (A.A.) and BEZUGLY (P.A.). **In Russian.** (Kinetics of the destruction of superconductivity by a magnetic field). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 463-70.

1-03872 — GIANSOLDATI (A.). **Recherches magnétiques sur deux alliages du systèmes A u-M n.** *J. Phys. Radium*, (1955), 16, No. 4, 342-3.

1-03873 — GROTER (C.J.), MAREL (V.D.L.C.), and BOLGER (B.). **On paramagnetic relaxation in the temperature region of liquid helium.** *Physica.* (1955), 21, No. 2, 103-9.

1-03874 — GOURCEAUX (M.). **Absorption, réflexion et transmission partielles simultanées d'une onde plane non uniforme par une couche mince (ou film) métallique.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 19, 1871-2.

1-03875 — GOZZINI (A.). **Sur quelques phénomènes magnéto-optiques liés à la résonance moléculaire des gaz dans le domaine des hyperfréquences.** *J. Phys. Radium*, (1955), 16, No. 5, 357-9.

1-03876 — GUNN (J.B.) and HOGARTH (C.A.). **Novel microwave attenuator using germanium.** *J. Appl. Phys.* (1955), 26, No. 3, 353-4.

1-03877 — GUSE (G.V.). **In Russian.** (Derivation of a criterion for the interaction of electrode substances during an electrical sparking treatment of a metal). *J. Tech. Phys., Moscow*, (1955), No. 4, 763-5.

1-03878 — HANEMAN (D.). **Barkhausen noise from a cylindrical core.** *J. Appl. Phys.* (1955), 26, No. 3, 355-6.

1-03879 — HAIKIN (M.S.) and ABAULINA (E.I.). **In Russian.** (A self-extinguishing light counter with an adjustable red limit). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 245-6.

1-03880 — HOGE (H.J.). **Comment on "comparison of resistances"** *Rev. Sci., Instrum.* (1955), 26, No. 2, 233.

1-03881 — HOLONYAK (N.) JR and LETAW (H. JR. **Sparked hydrogen treatment of gemanium surfaces.** *J. Appl. Phys.* (1955), 26, No. 3, 355.

1-03882 — IVANOV (G.A.) and REGEL (A.R.). **In Russian.** (Electrical properties of bismuth alloys. I.). *J. Tech., Phys., Moscow.* (1955), 25, No. 1, 49-65.

1-03883 — IVANOV (G.A.) and REGEL (A.R.). **In Russian.** (Electrical properties of bismuth alloys. II.). *J. Tech. Phys., Moscow*, (1955), 25, No. 1, 39-48.

1-03884 — ILIOVICI (M.A.). **Champ magnétique et force magnétomotrice, rationalisation des grandeurs et rationalisation des unités.** *Bull. Soc. Franc. Elect.* (1955), 5, No. 49, 27-38.

1-03885 — JURAVLEV (N.N.) and JDANOV (G.S.). **In Russian.** (The structure of super-conductors. VIII. X-ray and metallographic investigation of the system bismuth-rhodium). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 228-36.

1-03886 — JEAN (P.). **Role de la condition de Mandelstam dans les oscillations d'une lampe au néon.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 21, 2059-61.

1-03887 — KATZENELENBAUM (B.Z.). **In Russian.** (Perturbation of the electromagnetic field due to small deformations of the surface of a metal). *J. Tech. Phys., Moscow*, (1955), 25, No. 3, 546-57.

1-03888 — KETTLEBOROUGH (C.F.). **A simple electrical network analogy for the solution of the stepped thrust bearing.** *Aust. J. Appl. Sci.* (1955), 6, No. 1, 32-37.

1-03889 — KROGER (F.A.), VINK (H.J.) and VOLGER (J.). **Temperature dependence of the Hall effect and the resistivity of CdS single crystals.** *Philips Res. Rep.* (1955), 10, No. 1, 39-76.

1-03890 — KROENER (E.). **Dislocations and the Biot-Savart law.** *Proc. Phys. Soc., London, A.* (1955), 68, No. 1, 53-4.

1-03891 — LE BOT (J.) et LE MONTAGNER (S.). **La méthode diélectrique, nouveau procédé d'étude de l'adsorption de l'eau.** *J. Phys., Radium*, (1955), 16, No. 2, 163-4.

1-03892 — LEE (E.W.). **The (110) magnetostriction of some single crystals of iron and silicon-iron..** *Proc. Phys. Soc. London, A.* (1955), 68, No. 2, 65-71.

1-03893 — LITTLE (V.I.) and SMITH (V.). **The ionic conductivity of dilute potassium chloride solutions at centimetric wavelengths.** *Proc. Phys. Soc., London, B.* (1955), 68, No. 2, 65-74.

1-03894 — LOCQUIN (M.). **Recherche systématique de modificateurs de contraste par imprégnations sélectives en microscopie électronique.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 7, 741-2.

1-03895 — MALPICA (J.M.). **Absolute electrostatic voltmeter of hemispherical concentric electrodes.** *Rev. Sci., Instrum*, (1955), 26, No. 4, 333-6.

1-03896 — MAYEUR (R.). **Contribution à l'étude des contacts glissants.** *Rev. Gen. Elect.* (1955), 64, No. 1, 19-43.

1-03897 — MIKHAILOV (G.P.), KABIN (S.P.) and SAJIN (B.I.). **In Russian.** (Study of the dielectrical losses of polyethylene) *J.-Tech. Phys., Moscow*, (1955), 25, No. 4, 590-4.

1-03898 — MOSSOP (S.C.). **The freezing of supercooled water** *Proc. Phys. Soc., London, B.* (1955), 68, No. 4, 193-208.

1-03899 — **Nouvelles bornes de connexion en nylon.** *Prat. Industr. Mec.* (1955), 42, No. 4, 106-7.

1-03900 — NAGAMIYA (T.), YOSIDA (K.) and KUBO (R.). **Antiferromagnetism. Indirect exchange interaction and anisotropy energy.** *Advanc. Phys.* (1955), 4, No. 13, 59-84.

1-03901 — NAGAMIYA (T.) YOSIDA (K.) and KUBO (R.). **Statistical theory of antiferromagnetism.** *Advanc. Phys.* (1955) 4, No. 13, 85-112.

1-03902 — NAGAMIYA (T.), YOSIDA (K.) and KUBO (R.). **Antiferromagnetism. Fundamental facts and elementary theory.** *Advanc. Phys.* (1955), 4, No. 13, 6-58.

1-03903 — NARASIMHAN (P.T.). **Temperature dependence of of the dielectric constant of diamond.** *Proc. Phys. Soc., London*, B. (1955), 68, No. 5, 315-8.

1-03904 — NIKIFORUK (P.N.). **A technique for non-linear function generation.** *Electron. Engng.* (1955), 27, No. 325, 118-9.

1-03905 — NEISSEN (K.F.). **Magnetic anisotropy and van Vleck's relation for antiferromagnetics.** *Philips. Res. Rep.* (1955), 10, No. 2, 131-40.

1-03906 — O'BRIEN (M.C.M.). **The magnetic ground state of UF_3.** *Proc. Phys. Soc., London, A.* (1955), 68, No. 4, 351-2.

1-03907 — PAUTHENIER (M.). **Théorie de la vitesse de précipitation des particules submicroniques dans les champs électriques ionisés.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 15, 1610-1.

1-03908 — PAUTHENIER (M.). **Singularités de la vitesse de précipitation des particules submicroniques dans les champs électromagnetiques au voisinage d'une surface réfléchissante.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 18, 1761-3.

1-03909 — PERSCHITZ (Ya.N.). **In Russian.** (The conditions of formation and the stability of the layers proximal to the electrodes in dielectrics). *J. Exp. Theor. Phys.* (1955), 28, No. 2,181-90.

1-03910 — PRUJININA-GRANOVSKAYA (V.I.). **In Russian.** (Impulsive disruption of carborundum grains and behaviour of the grain complex under the action of current impulses). *J. Tech. Phys., Moscow*, (1955), 25, No. 4, 581-9.

1-03911 — POULET (H.). **Propriétés piézo-optiques et électro-optiques de la blende.** *J. Phys. Radium* (1955), 16, No. 3, 237-8.

1-03912 — POVAROV (G.N.). **In Russian.** (Mathematical theory of synthesis of contact (1,k) poles). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 5, 909-12.

1-03913 — PURL (O.T.) and VONFOERSTER (H.M.). **Velocity spectrography of electron dynamics in traveling field.** *J. Appl. Phys.* (1955), 26, No. 3, 351-2.

1-03914 — PUTLEY (E.H.). **The Hall of coefficient, electrical conductivity and magneto-resistance effect of lead sulphide and telluride.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 1, 22-34.

1-03915 — PUTLEY (E.H.). **Thermoelectric and galvanomagnetic effects in lead selenide and telluride.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 1, 35-42.

1-03916 — RAMANATHAN (K.G.) and DHILLON (J.S.). **A new method of measuring electrical resistivities.** *Natiure, London,* (1955), 175, No. 4465, 948.

1-03917 — REGEL (A.R.) and SOMINSKY (M.S.). **In Russian.** (Influence of added products on the mechanism of electrical conductivity of AlSb). *J. Tech. Phys., Moscow,* (1955), 25, No. 4, 768-70.

1-03918 — RIBAUD (G.) et BORDIER (D.). **Relation entre la température d'un corps ferromagnetique et la chaleur dissipée à son intérieur par un champ alternatif.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 7, 703-7.

1-03919 — RIDDLESTONE (J.). **Low-voltage, short duration arcs between separating contacts in low-voltage, substantially non-inductive circuits.** *Nature, London,* (1955), 175, No. 4464, 909.

1-03920 — ROBERTS (F.F.) TILLMAN (J.R.). **The barrier height of point-contact germanium diodes inferred from measurements of the voltage dependence of capacitance.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 2, 113-5.

1-03921 — RUTTEN (F.V.). **Mesure de la conductivité superficielle.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 19, 1887-9.

1-03922 — RZEWUSKI (H.) and SOSNOWSKI (L.). **Use of electric field pulses as a method of investigation of semiconducting films.** *Bull. Acad. Polonaise. Sci.,* (1955), 3, No. 2, 101-6.

1-03923 — SHAW (T.M.) and ELSKEN (R.H.). **Techniques for magnetic resonance measurements on granular hygroscopic materials** *J. Appl. Phys.* (1955), 26, No. 3, 313-6.

1-03924 — SHAW (W.C.), HUDSON (D.E.) and DANIELSON (G.C.). **Preparation of microscopic cristals for electrical measurements.** *Rev. Sci., Instrum.* (1955), 26, No. 2, 237-8.

1-03925 — SKOBELKIN (V.I.) and SOLOMKO (R.N.). **In Russian.** (Magnetostatics with ferromagnetic substances). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 385-93.

1-03926 — SMIT (J.) and BELJERS (H.G.). **Ferromagnetic resonance absorption in BaFe O a highly anisotropic crystal.** *Philips. Res. Rep.* (1955), 10, No. 2, 113-30.

1-03927 — SPENCER (E.G.), LECRAW (R.C.) and REGGIA (F.) **Circularly polarized cavities for measurement of tensor permeabilities.** *J. Appl. Phys.* (1955), 26, No. 3, 354-5.

1-03928 — SUCHET (J.). **Remarques sur la variation de la résistivité en fonction de la température des céramiques à base d'oxydes de manganèse et de nickel.** *J. Phys. Radium,* (1955), 16, No. 5, 417-22.

1-03929 — TILLIEU (J.) et GUY (J.). **Equations générales pour le calcul des susceptibilités magnétiques des molécules sans moment permanent.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 19, 1203-5.

1-03930 — TROITSKY (V.S.). **In Russian.** (Null method of measurement of weak electrical fluctuations). *J. Tech. Phys., Moscow,* (1955), 25, No. 3, 478-96.

1-03931 — TUOMIKOSKI (P.). **Constante diélectrique et association du pyrrole.** *J. Phys. Radium,* (1955), 16, No. 4, 347-8.

1-03932 — TZIDILKOVSKY (I.M.) and BASS (F.G.). **In Russian.** (Of G.M. Avakiantz's work "The theory of equations of transfer in strong electric fields). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 245.

1-03933 — UEBERSFEKD (J.) et ERB (Ed.). **Résonance paramagnétique des charbons. Détection d'un radical libre instable à l'air.** *J. Phys. Radium,* (1955), 16, No. 4, 340.

1-03934 — UEBERSFELD (J.). **Sur quelques modes d'utilisation des cavités résonnantes en résonance paramagnétique.** *J. Phys. Radium,* (1955), 16, No. 1, 78-9.

1-03935 — VLASOVA (R.M.) and STILBANS (L.S.). **In Russian.** (Study of the thermoelectrical properties of bismuth telluride). *J. Tech. Phys., Moscow,* (1955), 25, No. 4, 569-76.

1-03936 — VESELOVSKY (P.F.). **In Russian.** (Measurement of Σ' and tanp of a hard dielectric with centimeter radio-waves in the temperature interval -100° to +100°C.). *J. Tech. Phys., Moscow.* (1955), 25, No. 4, 601-9.

1-03937 — VOROBIEV (A.A.), ZAVADOVSKAYA (E.K.) and TRUBITZIN (A.M.). **In Russian.** (The correspondence between the stability of chemical compounds and the electrical solidity). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 6, 1065-6.

1-03938 — VOLOKOBINSKY (Yu.M.). **In Russian.** (Some questions about the theory of rupture of non-homogeneous dielectrics). *J. Tech. Phys., Moscow,* (1955), 25, No. 1, 74-80.

1-03939 — WALEN (R.J.). **Spectrographie magnétique semi-circulaire de quelques sources radioactives de faible activité specifique.** *J. Rech.* (1955), 30, 156-68.

1-03940 — WIND (G.) et SCHERER (M.). **Bobines productrices de champ magnétique par chambre de Wilson.** *J. Phys. Radium,* (1955), 16, No. 2, 92-6.

D 12. ELECTRONICS

1-03941 — ANTHONY (J.). **Etude, au photomultiplicateur, des scintillations produites dans un écran de sulfure de zinc par des particules.** *J. Phys. Radium,* (1955), 16, No. 3, 182-90.

1-03942 — ALFEROV (J.I.), KONOVALENKO (B.M.), RYVKIN (S.M.), TUCHKEVICH (V.M.) and UVAROV (A.I.). **In Russian.** (Plane germanium photo-diodes). *J. Tech. Phys., Moscow,* (1955), 25, No. 1, 11-7.

1-03943 — ALLEN (K.R.) and PHILLIPS (K.). **Use of a rubber sheet model for investigation of electron trajectories.** *Electron. Engng.* (1955), 27, No. 324, 82-4.

1-03944 — ARTHUR (J.B.), BARDSLEY (W.), BROWN (M.A. C.S.) and GIBSON (A.F.). **Carrier extraction in germanium.** *Proc. Phys., Soc. Lond. B.* (1955), 68, No. 1, 43-50.

1-03945 — ARNAL (R.). **Influence de la concentration superficielle d'hydrogène sur le seuil des microdécharges électriques dans le vide.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 6, 610-2.

1-03946 — AVAN (M.) et AVAN (L.). **Paires d'électrons du rayonnement cosmique: transfert de moment des photos de très grande énergie.** *J. Phys. Radium,* (1955), 16, No. 2, 97-100.

1-03947 — BAILEY (R.). **A versatile transistor tester.** *Electron. Engng.* (1955), 27, No. 324, 64-9.

1-03948 — BANBURY (P.C.) and HOUGHTON (J.). **Measurement of injection ratio of point contacts on germanium.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 1, 17-21.

1-03949 — BAYET (M.) et QUEMADA (D.). **La récombinaison entre électrons et ions positifs.** *J. Phys. Radium,* (1955), 16, No. 4, 334-8.

1-03950 — BERNARD (M.) et RACLOT (J.C.). **Protection cathodique - applications des anodes de magnésium.** *Bull. Soc. Franc. Elect.* (1955), 5, No. 49, 9-18.

1-03951 — BLET (G.). **L'effet photoélectrique des photopiles au sélénium aux basses températures.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 9, 962-3.

1-03952 — BOLINDER (E.F.). 5221. **On Fourier transforms in the theory of cathode ray tubes.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 487.

1-03953 — BOSE (H.N.). **Thermoluminescence of alkali halide phosphors.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 4, 249-52.

1-03954 — BOXER (R.). 5228. **A mathematical technique for the analysis of linear systems.** *Proc. Inst. Radio Engrs.* (1955), 43, No. 4, 489.

1-03955 — CANAWAY (R.J.), RAYMOND (W.F.) and TAYLER (J.C.). **The automatic recording of animal behavior in the field.** *Electron. Engng.* (1955), 27, No. 325, 102-5.

1-03956 — CHAMPIE (R.) DORMONT (H.) and MORILLEAU. (E.). **A photo-multiplier tube for scintillation counting.** *Philips Tech. Rev.* (1955), 16, No. 9, 250-8.

1-03957 — CHEREPNEV (A.A.). **In Russian.** (The state of the activator of copper in zinc sulphide phosphors). *J. Exp. Theor. Phys.* (1955), 28, No. 4, 458-62.

1-03958 — COLLET (L.H.). **Eclaircissements sur les cataphorèses de P. Jolibois et l'inversion du phénomène d'Hittorf** *J. Phys. Radium,* (1955), 16, No. 5, 431-2.

1-03959 — CURIE (G.) et CURIE (D.). **Sur la détermination des profondeurs des pièges à électrons par thermoluminescence.** *J. Phys. Radium,* (1955), 16, No. 3, 199-205.

1-03960 — CURIE (D.). **Sur la loi fondamentale de sortie des pièges.** *C.R. Acad. Sci., Paris,* (1955), 240, No. 15, 1614-6.

1-03961 — CURIE (D.). **Mouvement des électrons de conductibilité, en luminescence cristalline.** *J. Phys. Radium*, (1955), 16, No. 1 77-8.

1-03962 — D'ANDLAU (Ch.). **Répartition en nombre et en énergie des particules des gerbes électroniques.** *J. Phys. Radium*, (1955), 16, No. 3, 176-8.

1-03963 — DALZIEL (R.) and CHALLANDS (A.). **Visual impedance-matching equipment.** *Wireless Engr.* (1955), 34, No. 4, 99-106.

1-03964 — DE BOER (F.) and EMMENS (H.), **Sedimentation of fluorescent in cathode ray tubes.** *Philps. Tech. Rev.* (1955), 16, No. 8, 232-6.

1-03965 — DEKKER (A.J.). **On the escape mechanism of secondary electrons from insulators.** *Physica.* (1955), 21, No. 1, 29-38.

1-03966 — DIAMOND (J.M.). **Checking codes for digital computers.** *Proc. Inst. Radio Engrs.* (1955), 43, No. 4, 487.

1-03967 — DRABKIN (A.I.). **In Russian.** (The semi-conducting properties of some highly resistant metallic alloys). *J. Tech. Phys., Moscow*, (1955), 25, No. 1, 81-4.

1-03968 — DROZDOV (V.I.) and SMIRNOV (A.F.). **In Russian.** (Restoration of controllability of ionic instruments). *J. Tech. Phys., Moscow*, (1955), 25, No. 1, 85-96.

1-03969 — DOME (G.). **Télécommande d'appareils par faisceau lumineux. Application à la stabilisation électronique des très hautes tensions.** *J. Phys. Radium*, (1955), 16, No. 4, 428-9.

1-03970 — FEUILLADE (G.). **Contribution à l'étude de cellules galvanométriques à répartitions de courant variées.** *J. Tech.* (1955), No. 30, 199-201.

1-03971 — FIALKOW (A.D.) and GERST (I.). **RLC lattice transfer functions.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 462-9.

1-03972 — FLOOD (J.E.). **Junction-transistor trigger circuits.** *Wireless Engr.* (1955), 32, No. 5, 122-30.

1-03973 — GABOR (D.). **Electronics in the Imperial College of Science and Technology, London.** *Nature, London* (1955), 175, No. 4464, 885-6.

1-03974 — GENIN (R.). **Un voltmètre à triode inversée pour la mesure des tensions négatives.** *J. Phys. Radium*, (1955), 16, No. 1, 74-5.

1-03975 — GLAUBER (J.J.). **Valve noise produced by electrode movement.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 488.

1-03976 — GUILLIEN (R.) et MAYER (H.). **Sur la mesure des constantes de temps à l'oscillographe cathodique.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 7, 739-41.

1-03977 — HITTINGER (W.C.), PETERSON (J.W.) and THOMAS (D.E.). **Intrinsic barrier transistor.** *Proc. Inst. Radio Engrs.* (1955), 43, No. 4, 487.

1-03978 — JAGER (J.). **The application of point-contact germanium diodes.** *Philips. Tech. Rev.* (1955), 16, No. 8, 225-31.

1-03979 — JAMIESON (E.). **Integrated microwave circuits.** *Electron. Engng.* (1955), 27, No. 324, 60-3.

1-03980 — JOHNSON (A.B.). **Gain measurements on computing amplifiers.** *Electron. Engng.* (1955), 27, No. 325, 127-9.

1-03981 — KALLMANN (H.E.). **Beam-hugging plates for unlimited cathode ray deflection.** *Proc. Inst. Radio. Enbrs.* (1955), 43, No. 4, 485.

1-03982 — KALLMANN (H.E.). **Single-sideband transmission without transient distortion.** *Proc. Inst. Radio Engrs.* (1955), 43, No. 4, 485-6.

1-03983 — KAUFER (G.E.). **A versatile pulse shaper.** *Electron. Engng.* (1955), 27, No. 324, 78-81.

1-03984 — KIRKBRIDE (J.). **Borazole and boron nitride scintillators.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 4, 253-4.

1-03985 — KAUPHINEE (T.M.). **Method of reducing zero error and drift in breaker type dc amplifiers.** *Rev. Sci., Instrum.* (1955), 26, No. 4, 401-2.

1-03986 — KLEINPENTER (M.M.). **Le transistron dans les circuits trigger.** *Bull. Soc. Franc. Elect.* (1955), 5, No. 49, 39-52.

1-03987 — KUZNETZOV (M.I.), LUKIRSKY (P.I.) and PERFILOV (N.A.). **In Russian.** (The dependance of the charge of lithium ions on their velocity). *C.R. Acad. Sci., U.R.S.S.* (1955), 100, No. 4, 665-7.

1-03988 — KONOVALENKO (B.M.), RYVKIN (S.M.) and TUCHKEVICH (V.M.). **In Russian.** (Sensitivity of germanium photo-diodes to X-rays). *J. Tech. Phys., Moscow.* (1955), 25, No. 1, 18-20.

1-03989 — LAGRENAUDIE (J.). **Propriétés du phosphure de zinc $P_2 Zn_3$ en cristaux.** *J. Phys. Radium*, (1955), 16, No. 3, 233-4.

1-03990 — LAROSA (R.) and CARLIN (H.J.). **A general theory of wideband matching with dissipative 4 poles.** *J. Math. Phys.* (1955), 33, No. 4, 331-45.

1-03991 — LAUDET (M.). **Optique électronique des systèmes cylindriques présentant un plan de symétrie. I. L'approximation du premier ordre.** *J. Phys. Radium*, (1955), 16, No. 2, 118-24.

1-03992 — LEUBA (P.). **Etude théorique du fonctionnement du dernier étage d'un photomultiplicateur.** *J. Phys. Radium*, (1955) 16, No. 2, 161-2.

1-03993 — LEUBA (P.). **Etude théorique du fonctionnement du dernier étage d'un photomultiplicateur. II.** *J. Phys. Radium*, (1955), 16, No. 4, 296-303.

1-03994 — LEDERHANDLER (S.R.) and GIACOLETTO (L.J.). **Measurement of minority carrier lifetime and surface effects in junction devices.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 477-82.

1-03995 — LOUISELL (W.H.) and PIERCE (J.R.). **Power flow in electron beam devices.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 425-7.

1-03996 — LORTIE (Y.). **Utilisation de thermistances comme jauges à vide.** *J. Phys. Radium*, (1955), 16, No. 4, 317-19.

1-03997 — LOW (G.G.). **Modulation of the surface conductance of germanium and silicon by external electric fields.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 1, 10-6.

1-03998 — LOW (G.G.E.). **Carrier concentration disturbances in semiconductors.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 5, 310-4.

1-03999 — LUFCY (C.W.). **A survey of magnetic amplifiers.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 404-13.

1-04000 — MALOFF (I.). **Russian vacuum tube terminology.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 488-9.

1-04001 — MARCZYNSKI (R.). **Stabilized output electronic generator for power system analysers.** *Bull. Acad. Polonaise. Sci.*, (1955), 3, No. 1, 17-22.

1-04002 — McDONELL (J.A.), HANSON (M.A.) and WILSON (P.R.). **The energy loss distributions of I Me V electrons in aluminium foils.** *Aust. J. Phys.* (1955), 8, No. 1, 98-107.

1-04003 — MEUNIER (R.), BONPAS (M.) et LEGRAND (J.P.). **Compteurs de Geiger à comptage interne contenant de la vapeur d'eau tritiée.** *J. Phys. Radium*, (1955), 16, No. 2, 148-51.

1-04004 — MEUNIER (R.), BONPAS (M.) et LEGRAND (J.P.). **Mouvement propre d'origine thermionique des compteurs de Geiger.** *J. Phys. Radium*, (1955), 16, No. 2, 145-7.

1-04005 — MEYER (H.J.G.). **On the theory of radiative transitions of trapped electrons in polar crystals.** *Physica.* (1955), 21, No. 4, 253-68.

1-04006 — MOIJES (B.Ya). **In Russian.** (Electrostatic mean limit conditions for metallic grids). *J. Tech. Phys., Moscow*, (1955), 25, No. 1, 167-176.

1-04007 — MOIJES (B.Ya.). **In Russian.** (Electrodynamical mean limit conditions for metallic grids). *J. Tech. Phys., Moscow*, (1955), 25, No. 1, 158-66.

1-04008 — MORRIS (F.L.). **Discriminator circuit analysis.** *Wireless Engr.* (1955), 34, No. 4, 93-8.

1-04009 — MOORE (A.R.) and WEBSTER (W.M.). **The effective surface recombination of a germanium surface with a floating barrier.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 427-35.

1-04010 — MUNIER (J.). **Atténuateur étalon pour cristaux détecteurs U.H.F.** *J. Phys. Radium*, (1955), 16, No. 5, 429-30.

1-04011 — NASLEDOV (D.N.), DORIN (V.A.) and DIKINA (I.M.). **In Russian** (X-ray study of selenium layers obtained by evaporation in vacuum). *J. Tech. Phys. Moscow*, (1955), 25, No. 1, 29-38.

1-04012 — NIFONTOFF (N.). **Considérations sur la localisation des phénomènes de génération et de recombinaisons dans les barrières de contact et à la surface d'un demi-conducteur.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 16, 1634-6.

1-04013 — OAKES (F.). **Analysis of the common-base transistor circuit.** *Electron. Engng.* (1955), 27, No. 325, 120-6.

1-04014 — OLLE (J.). **Etude et réalisation d'un oscillographe cathodique à quatre faisceaux et fonctionnant sous haute tension.** *Rev. Gen. Elect.* (1955), 64, No. 2, 104-8.

1-04015 — PAPOULAR (M.). **Une méthode de mesure de vitesse d'électrons de grande énergie.** *C.R. Aad. Sci., Paris*, (1955), 240, No. 19, 1194-6.

1-04016 — PERAKIS (N.) et SERRES (A.). **Etude de la semi-conductivité de l'oxyde cuivreux d'après son comportement magnétique entre 80 et 1000° K.** *J. Phys. Radium*, (1955), 16, No. 5, 387-94.

1-04017 — PESTEIL (P.), PESTEIL (L.) et KARA (R.). **Luminescence de cristaux aux basses températures. VI. Transition T—S de l'hexachlorobenzène.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 9, 960-2.

1-04018 — PETERLIN (A.). **Resolving power of the three-grid system of the bennett-type mass spectrometer.** *Rev. Sci., Instrum.* (1955), 26, No. 4, 398-9.

1-04019 — PINCHERLE (L.). **Auger effect in semiconductors.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 5, 319-20.

1-04020 — PRAGLIN (J.) and BRECHER (G.A.). **Amplifier for 5734-tube bristle flowmeter.** *Rev. Sci., Instrum.* (1955), 26, No. 4, 385-7.

1-04021 — PRILEJAEVA (I.N.), LIVSCHITZ (V.V.) and SPIVAK (G.V.). **In Russian.** (The electronic-optical study of the non-stationary emission from an oxide cathode in vacuum and in gas). *J. Tech. Phys., Moscow*, (1955), 25, No. 1, 97-107.

1-04022 — PRICE (R.). **On entropy equivalence in the time-and frequency-domains.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 484-5.

1-04023 — SEPTIER (A.). **Mesure de la répartition des champs électromagnétiques dans une cavité résonnante.** *J. Phys. Radium*, (1955), 16, No. 2, 108-74.

1-04024 — RIETJENS (L.H.), ARKENBOUT (G.J.), WOLTERS (G.F.) and KLUYVER (J.C.). **Influence of the distance between source and crystal on the detection-efficiency of a gamma-scintillation spectrometer.** *Physican.* (1955), 21, No. 2, 110-6.

1-04025 — RODAK (M.I.). **In Russian.** (The follow-up of the thermal motion of electrons in a two-wave amplifier). *J. Tech. Phys., Moscow.* (1955), 25, No. 4, 644-8.

1-04026 — ROSENBLUM (S.). **A propos du compteur à étincelles.** *J. Phys. Radium*, (1955), 16, No. 2, 159.

1-04027 — RUBIN (L.G.) and STRAUB (W.D.). **High-voltage silicon diodes.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 490-1.

1-04028 — RYVKIN (S.M.). **In Russian.** (Mechanism of action of germanium photo-diodes). *J. Tech. Phys., Moscow*, (1955), 25, No. 1, 21-8.

1-04029 — SALAUZE (M.J.). **Les realisations nouvelles dans l'industrie de l'accumulateur alcalin.** *Bull. Soc. Franc. Elect.* (1955), 5, No. 49, 19-26.

1-04030 — SAW PAK (T.). **Noise from hot-cathode discharges.** *Proc. Phys. Soc. Lond. B.* (1955), 68, No. 5, 292-6.

1-04031 — SMITH (R.A.). **Semi-conductors, transistors and photocells.** *Advanc. Sci.*, (1955), 11, No. 44, 391-403.

1-04032 — SINGH (A.). **Modes and operating voltages of interdigital magnetrons.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 470-6.

1-04033 — SOLOMONOFF (R.J.). **Effect of Heisenberg's principle on channel capacity.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 484.

1-04034 — STOYANOV (P.A.). **In Russian.** (Influence of the departure of the geometrical form of the pole terminal of the objective from circular symmetry on the resolving power of the electron microscope). *J. Tech. Phys., Moscpw*, (1955), 25, No. 4, 625-35.

1-04035 — VALLESE (L.M.). **Understanding the gyrator.** *Proc. Inst. Radio Engrs.* (1955), 43, No. 4, 483-4.

1-04036 — VUL (B.M.). **In Russian.** (Dielectric properties of transition layers in semi-donductors). *J. Tech. Phys., Moscow*, (1955), 25, No. 1, 3-10.

1-04037 — WARNECKE (R.R.), GUENARD (P.), DOEHLER (O.) and EPSZTEIN (B.). **The "M" – type carcinotron tube.** *Proc. Inst. Radio. Ingrs.* (1955), 43, No. 4, 413-24.

1-04038 — WARD (A.L.) and KRUMBEIN (A.D.). **Some characteristics of chlorine quenched Geiger-Mueller counters.** *Rev. Sci., Instrum.* (1955), 26, No. 4, 341-.

1-04039 — WINKEL (J.). **Feedback amplifiers for carrier telephone systems.** *Philips. Tech. Rev.* (1955), 16, No. 10, 287-95.

1-04040 — WILSON (P.R.). **The effect of multiple scattering on electron energy loss distributions.** *Aust. J. Chem.* (1955), 8, No. 1, 90-7.

1-04041 — YANG (R.F.H.). **Suasi-Fraunhofer gain of parabolic antennas.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 486-7.

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1-04042—ATKINS (V.L.). **The operation and loading characteristics of valve oscillators for dielectric heating.** *Electron. Engng.* (1955), 27, 325, 106-10.

1-04043 — ATTEW (J.E.). **A frame synchronizing separator.** *Electron. Engng.* (1955), 27, No. 324, 70-1.

1-04044 — ARMSTRONG (H.L.). **An approximate treatment of cascaded four-terminal networks.** *Electron. Engng.* (1955), 27, No. 325, 130-1.

1-04045 — BASOV (N.G.), VESELAVO (V.G.) and JABOTINSKY (M.E.). **In Russian.** (The increase of the efficiency of a volume resonator with the help of regneration). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 242.

1-04046 — BEAM (W.R.). **On the possibility of amplification in space-charge-potential-depressed electron streams.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 454-62.

1-04047 — BRIGANTI (E.). **Studio del dielettrico dei condensatori a carta** (Etude de diélectrique des condenseurs à papier). *Alta Frequenza* (1954), 23, No. 3-4, 139-56.

1-04048 — CHENOT (M.). **Effects de charge d'espace dans une décharge en haute fréquence I.** *J. Phys. Radium*, (1955), 16, No. 1, 54-61.

1-04049 — CHENOT (M.). **Effets de charge d'espace dans une décharge en haute fréquence. II.** *J. Phys. Radium*, (1955), 16, No. 2, 101-7.

1-04050 — CHEVALIER (A.), KAHAN (T.) et POLACCO (E.). **Propagation des ondes électromagnétiques dans un milieu gyromagnétique anisotrope, contenu dans un guide rectangulaire.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 12, 1323-4.

1-04051 — CLARKE (C.) and HARRISON (V.A.W.). **Low-frequency direction finder.** *Wireless Engr.* (1955), 34, No. 4, 109-14.

1-04052 — CROWTHER (G.O.) and LIGHT (L.H.). **A single cycle timer for small spot welders.** *Electron. Engng.* (1955), 27, No. 325, 111-4.

1-04053 — DAVIEW (L.W.) and COWCHER (E.). **Microwave and metre wave radiation from the positive column of a gas discharge.** *Aust. J. Phys.* (1955), 8, No. 1, 108-28.

1-04054 — DAWIRS (H.N.). **A chart for analyzing transmission-line filters from input impedance characteristics.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 436-43.

1-04055 — ESCANDE (L.). **Oscillations superposées dans une chambre d'équilibre à étranglement.** *C.R. Acad. Sci., Paris*, (1955), 240, No. 9, 932-5.

1-04056 — ESHLEMAN (V.R.), GALLAGHER (P.B.) and PETERSON (A.M.). 5227. **Continuous radar echoes from meteor ionisation trails.** *Proc. Inst. Radio Engrs.* (1955), 43, No. 4, 489.

1-04057 — EVERHART (T.E.). **Concerning the noise figure of a backward-wave amplifier.** *Proc. Inst. Radio. Engrs.* (1955), 43, No. 4, 444-9.

1-04058 — GAGLIARDI (D.). **Comportamento delgi scaricatori per linee telefoniche.** (Comportement des déchargeurs pour lignes Téléphoniques). *Alta. Frequenza* (1954), 23, No. 3-4, 115-38.

1-04059 — GALPERIN (B.S.). **In Russian.** (Contact noises). *J. Tech. Phys., Moscow*, (1955), 25, Bo. 3, 410-3.

1-04060 — GAJEWSKI (R.). **On transients in wave guides.** *Bull. Acad. Polonaise. Sci.* (1955), 3, No. 1, 29-34.

1-04061 — GRIFFITHS (H.V.). **Focusing of waves in radio reception.** *Nature, London*, (1955), 175, No. 4465, 948-9.

1-04062 — GRIFFITHS (L.J.), DAVIES (R.M.) and RICHARDS (D.A.). **A sensitive continuously-evacuated cathode-ray oscillograph.** *Electron. Engng.* (1955), 27, No. 324, 48-52.

1-04063 — HASKELL (J.H.) and HASKELL (P.T.). **A combined frequency sub-standard and beat frequency oscillator.** *Electron. Engng.* (1955), 27, No. 324, 71-3.

1-04064 — HAY (D.R.) and HARTZ (T.R.). **Thunderstorm signals at very-high frequency and ultra-high frequency.** *Nature, London*, (1955), 175, No. 4465, 949-50.

1-04065 — KING (R.). **Cap problem in Antenna theory.** *J. Appl. Phys.* (1955), 26, No. 3, 317-21.

1-04066 — KULIKOWSKI (R.) and PLEBANSKI (J.). **Optimum characteristics of linear pulse systems.** *Bull. Acad. Oolonaise. Sci.*, (1955), 3, No. 1, 23-8.

1–04067 — LE BOT (J.) et LE MONTAGNER (S.). **Propriétés diélectriques en ondes centimétriques de l'eau adsorbée sur gel de silice.** *J. Phys. Radium*, (1955), 16, No. 1, 79-80.

1–04068 — LEJAY (P.), PILLET (G.) et CHEZLEMAS (R.). **Mesure de l'absorption nondéviative des ondes radioélectriques dans l'ionosphère.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 1,8 1745 9.

1–04069 — LOWE (A.E.). **A stabilized radio-frequency E.H.T. supply.** *Electron. Engng.* (1955), 27, No. 324, 85-6.

1–04070 — LYON (A.J.). **Series resonant circuit theory.** *Wireless Engr.* (1955), 34, No. 4, 107-8.

1–04071 — MAKIA (G.). **Criteri per il progetto di trasformatori per telectmunicazioni.** (Critères pour le projet des transformateurs pour télécommunications). *Alta. Frequenza* (1954), 23, No. 2, 79-89.

1–04702 — MORRIS (D.). **Molecular ions in discharges in the inert gases.** *Proc. Phys. Soc. London, A.* (1955), 68, No. 1, 11-8.

1–04073 — MUNIER (J.). **Champ rayonné par les cylindres circulaires à fentes résonnantes.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 14, 1520-2.

1–04074 — NIFONTOFF (N.). **Une interprétation possible de l'effet de scintillation dans les détecteurs à cristaux.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 17, 1695-7.

1–04075 — ORCHARD (H.J.). **Transformation for constant-impedance networks.** *Wireless Engr.* (1955), 32, No. 5, 139-41.

1–04076 — PALLARI (R.). **Perturbazioni e rigenerazione dei segnali.** (Pertubations et régéneration des signaux). *Alta. Frequenza* (1954), 23, No. 1, 16-36.

1–04077 — PAPOULAR (M.). **Lignes et bandes de diffraction électronique aux énergies voisines de 1MeV.**, *C. R. Acad. Sci., Paris*, (1955), 240, No. 19, 1874-6.

1–04078 — PASYNKOV (V.V.). **In Russian.** (Semi-conducting ignitors for ignition rectifiers). *J. Tech. Phys., Moscow*, (1955), 25, No. 3, 377-96.

1–04079 — ROBIN (L.). **Distorsion harmonique en modulation de fréquence sinusiodale. Cas d'un étage d'amplification à tube pentode et à transformateur accordé.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 14, 1518-20.

1–04080 — RUELLE (U.). **Sulle condizioni di risonanza di un sistema di due circuiti accoppiati magneticamente.** (Sur les sonditions de sésouanse d'un systéme de deux circuits couplés imagnétiquement). *Alta. Frequenza* (1954), 23, No. 3-4, 157-77.

1–04081 — SALMON (J.). **Théorie de la décharge haute fréquence dans les gaz aux basses pressions. Calcul de la fonction de distribution des électrons.** *J. Phys., Radium*, (1955), 16, No. 3, 210-8.

1–04082 — SCHURINK (J.J.). **The twin-cone moving-coil loudspeaker.** *Philips. Tech. Rev.* (1955), 16, No. 9, 241-9.

1–04083 — SEPTIER (A.). **Valeur du pouvoir séparateur théorique de l'objectif électrostatique à immersion.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 11, 1200-2.

1–04084 — SMITH (W.E.). **The noise-power brandwidths of iterated low-pass RC filters.** *Aust. J. Appl. Sci.*, (1955), 6, No. 1, 7-12.

1–04085 — SMITH-ROSE (R.L.). **Radio research station, Ditton parkf bucks.** *Nature, London*, (1955), 175, No. 4465, 921-3.

1–04086 — VASENIN (F.I.). **In Russian**. (Thermoelestrical properties of alloys of the system bismuthtellurium). *J. Tech. Phys., Moscow*, (1955), 25, No. 3, 397-401.

1–04087 — VESSEM (J.C.V.). **The theory and construction of germanium diodes.** *Philips. Tech. Rev.* (1955), 16, No. 8, 213-24.

1–04088 — WAIT (J.R.) and POPE (D.). **Input resistance of L. F. unipole aerials.** *Wireless Engr.* (1955), 32, No. 5, 131-8.

1–04089 — WILKNSON (K.J.R.). **Measurement as a factor in understanding.** *J. Instn. Elect. Engrs.* (1955), 1, No. 1, 66-9.

D 14. CRYSTLALOGRAPHY and SOLID STATE

1–04090 — ABRAHAMS (S.C.) and CALHOUN (B.A.). **A Magneto-X ray study of magnetite at 78 K.** *Acta. Cryst.* (1955), 8, No. 5, 257-61.

1–04091 — ALEXOPOULOS (K.D.). **Formation and indentification of thallium single crystals.** *Acta. Cryst.* (1955), 8, No. 4, 235-7.

1–0492 — AMALKUMAR RAYCHAUDHURI. **Note on the network approximation in metals.** *Proc. Phys. Soc., Lonon, A.* (1955), 68, No. 5, 441-4.

1–04093 — ANSELM (A.I.) and FIRSOV (Yu. A.). **In Russian.** (The length of the free path of a non-localized exciton in an atomic crystal). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 151-9.

1–04094 — ARNDT (U.W.). **X-ray analysis group of the Institute of physics:Spring conference.** *Nature, London*, (1955), 175, 175, No. 4464, 886-8.

1–04095 — BARRERE (G.). **Contribution à l'étude de l'absorption des rayons X par des cristaux de quartz au voisinage de l'angle de Bragg.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 19, 1907-9.

1–04096 — BERGHEZAN (A.) et HERENGUEL (J.). **Mise en évidence des imperfections de structure dans les "sous-grains" des cristaux métalliques.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 14, 1536-7.

1–04097 — BERGMAN (G.) and JAROSS (W.). **On the crystal structure of the phase in the silver-zinc system and the mechanism of the transformation.** *Acta. Cryst.* (1955), 8, No. 4, 232-5.

1–04098 — BERTAUT (F.). **Statistique des fonctions complexes. Applications à la Cristaliographie.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 9, 938-40.

1–04099 — BLOEM (J.) and KROGER (F.A.). **A relation between hardness and stoichiometry in lead sulphide single crystals.** *Nature, London*, (1955), 175, No. 4463, 861.

1–04100 — BOEHM (H.P.) and HOFMANN (U.). **Die rhomboedrische Modifikation des Graphits.** (The Rhombohedral modification of graphite). *Z. Anorg. Chem.* (1955), 278, No. 1/2, 58-77.

1–04101 — BRAUN (P.B.) and VUCHT (J.H.N.V.). **Al-Tinlter-, metallic compounds. II.** (1955), 8, **No.** 4, 246. *Acta. Eryst.* (1955) 8, No. 246.

1–04102 — BRYDEN J.H.). **The crystal structure of the hydrochloride and hydrobromide salts of 1,3-dimethyl-5-iminotetrazole.** *Acta. Cryst.* (1955), 8, No. 4, 211-7.

1–04103 — BUTTERS (R.G.) and GORDON PARR (J.). **A high-temperature X-ray goniometer.** *Canad. J. Technol.* (1955), 33, No. 2, 117-21.

1–04104 — CONJEAUD (P.). **Etude par diffraction d'électrons des produits de condensation de la vapeur de TiO_2 sur monocristaux d'halogénures chauffés.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 19, 1210-3.

1–04105 — COX (E.G., CRUICKSHANK (D.W.J.) and SMITH (J.A.S.). **Crystal structure of benzene:a new type of systematic error in precision X-ray crystal analysis.** *Nature, Lonodn*, (1955), No. 4461, 766.

1–04106 — DAVIES (D.R.) and BLUM (J.J.). **The crystal structure of parabanic acid.** *Acta. Cryst.* (1955), 8, No. 3, 129-37.

1–04107 — DENNING (R.M.). **Directional grinding hardness in a diamond:A further stydy.** *Amir. Min.* (1955), 40, No. 34 186-91.

1–04108 — DONNAY (J.D.H.). **The lattice of rhombohedrl sulfur** *Acta. Cryst.* (1955), 8, No. 4, 245-6.

1–04109 — DORIN (V.A.). **In Russian.** (Electron-microscopic study of the sintering of titanium dioxide crystals). *J. Tech. Phys., Moscow*, (1955), 25, No. 4, 577-80.

1–04110 — FRANKLIN (R.E.) and GOSLING (R.G.) **The structure of sodium thymonucleate fibres III. The three-dimensional Patterson fuction.** *Acta. Cryst.* (1955), 8, No. 3, 151-7.

1–04111 — FRANKS (F.), GEACH (G.A.) and CHURCHMAN (A.T.). **Lamellar defects in single crystals of silicon.** *Proc. Phys. Soc., London*, (1955), 68, No. 2, 111-3.

1–04112 — GELLER (S.) and CETLIN (B.B.). **The crystal structure of RhSe.** *Acta. Cryst.* (1955), 8, No. 5, 272-4.

1–04113 — GIANSOLDATI (A.) et LINDE (J.). **La résistance électrique et la structure cristalline des alliages Au_3 Mn dans l'intervalle de température 183 à 700 C.** *J. Phys., Radium*, (1955), 16, No. 4, 341-2.

1–04114 — GOPAL (R.). **On the tendency of spontaneous crystallisation in supersaturated solutions and undercooled melts.** *Z. Anorg. Chem.* (1955), 287, No. 1/2, 46-52.

1–04115 — GOPAL (R.). **Relation between lattice energy and melting points of some crystalline substances. II. Alkali metals.** *Z. Anorg. Chem* (1955), 278, No. 1/2, 42-45.

1–04116 — HAMILTON (W.C.). **The crystal stucture of dimethylphosphinoborine trimer.** *Acta. Cryst.* (1955), 8, No. 4, 199.

1–04117 — HEAD (A.K.) and LOUAT (N.). **The distributions of dislocations in linear arrays.** *Aust. J. Phys.* (1955), No. 1, 1-7.

1-04118 — HEATON (L.) and GINGRICH (N.S.). **The crystal structure of Mn Sb.** *Acta. Cryst.* (1955), 8, No. 4, 207-11.

1-04119 — HOCART (R.) et OBERLIN (A.). **Epitaxie des microcristaux d'or sur le graphite. Etude au microscope électronique et par diffraction électronique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1228-30.

1-04120 — HOERNI (J.A.) and WOOSTER (W.A.). **The X-ray anomalous reflexions from diamond.** *Acta. Crys.* (1955), 8, No. 4, 187.

1-04121 — HUTTIG (W.) and GINSBERG (H.). **Kristallmorphologische Beobachtungen bei der Entwasserung von Aluminiumoxyd-Trihydrat.** (Crystal-morphologic observations during dehydration of alumimum oxide-trihydrate). *Z. Anorg. Chem.* (1955), 278, No. 1/2: 93-107.

1-04122 — HUGHES (G.) and SPURR (R.T.). **An experimental investigation of non-metallic wear.** *Proc. Phys. Soc., London, B.* (1955), 68, No. 2, 106-11.

1-04123 — IVERONOVA (V.I.) and KATZNELSON (A.A.). **In Russian.** (The mosaical pattern of crystals in polycrystalline metals). *J. Tech. Phys., Moscow,* (1955), 25, No. 4, 696-9.

1-04124 — JACROT (B.). **Mesure de l'énergie de neutrons très lents après une diffusion inélastique par des polycristaux et des monocristaux.** *C. R. Acad. Sci., Paris.,* (1955), 240, No. 7, 745-7.

1-04125 — JANSEN (L.) and WETTE (F.W.). **On the theory of transitions in molecular crystals.** *Physican,* (1955), 21, No. 1, 83-4.

1-04126 — JENSEN (L.H.). **The crystal structure of creatine monohydrate.** *Acta. Cryst.* (1955), 8, No. 4, 237-41.

1-04127 — JEVANDROV (N.D.). **In Russian.** (The influence of the migration of energy on the polarization of the fluorescence of mono-crystals). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 455-8.

1-04128 — JOUTY (R.). **Sur l'observation d'un nouveau'type de reliefs à la surface de cristaux de carbure de silicium.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 17, 1713-5.

1-04129 — KARTHA (G.) and RAMACHANDRAN (G.N.). **Applications of the difference Patterson technique in structure analysis.** *Acta. Cryst.* (1955), 8, No. 4, 195.

1-04130 — KENNEDY (A.J.). **Recovery and recrystallization in in metals examined in terms of the restoration of the transient creep properties.** *Proc. Phys. Soc. London, B.* (1955), 68, No. 5, 257-76.

1-04131 — KOHLER (T.R.) and PARRISH (W.). **X-ray diffractometry of radioactive samples.** *Rev. Sci., Instrum,* (1955) 26, No. 4, 374-8.

1-04132 — KOMATA (T.). **Internal friction of white tin single crystal.** *Nature, London,* (1955), 175, No. 4465, 948.

1-04133 — KRANENDONK (J.). **Theory of the low temperature properties of ferromagnetic crystals.** *Physican,* (1955), 21, No. 1, -81-2.

1-04134 — LATIERE (H.J.). **Stéréographie:Un appareil permettant de déterminer rapidement les orientations des cristaux à partir de diagrammes de Laue.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1237-8.

1-04135 — LAZAREV (B.G.) and OVCHARENKO (O.N.). **In Russian.** (The influence of holes (vacancies) in the crystal lattice on the electric resistance of a metal). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 5, 857-8.

1-04136 — LE CORRE (Y.). **Etude de l'élasticité et de la piézoélectricité cristallines.** *Bull. Soc. Fran. Minér. Cryst.* (1955), 78, No. 1-3, 33-83.

1-04137 — LINDSEY (J.M.) and BARNES (W.H.). **The crystal and molecular structure of codeine hydrobromide dihydrate.** *Acta. Cryst.* (1955), 8, No. 4, 227-32.

1--04138—LIPSON (H.) and PINNOCK (P.R.).**A Stencil method for computing structure factors.** *Acta. Cryst.* (1955), 8, No. 3, 172-75.

1-04139 — MATHIEU (J-P.). **Dichroisme infrarouge et structure cristalline.** *J. Phys. Radium,* (1955), 16, No. 3, 219-31.

1-04140 — MAZZI (F.). **The crystal structure of cupric tetrammine sulfate monohydrate Cu (NH3)4 SO4 HO2.** *Acta. Cryst.* (1955), 8, No. 3, 137-42.

1-04141 — MEIKLAR (P.V.). **In Russian.** (The F-centers in crystals of a silver halide). *J. Exp. Theor. Phys.* (1955), 28, No. 2, 252-3.

1-04142 — PEPINSKY (R.) and FRAZER (B.C.). **Modification of general electric SPG goniometer for single-crystal neutron diffraction measurements.** *Rev. Sci., Instrum,*(1955),26,No.4,402-3.

1-04143 — PERUTZ (M.F.), TROTTER (I.F.), HOWELLS (E.R.) and GREEN (D.W.). **An X-ray study of reduced human heamoglobin.** *Acta. Cryst.* (1955), 8, No. 4, 241-5.

1-04144 — RESHETNIKOV (A.M.), SALNIKOV (P.I.) and TZAREV (B.M.). **In Russian.** (The form of tungsten crystals). *J. Tech. Phys., Moscow,* (1955), 25, No. 3, 414-5.

1-04145 — ROBERTSON (J.M.). **Some properties of Fourier strips with applications to the digital computer.** *Acta. Cryst.* (1955), 8, No. 5, 286-9.

1-04146 — ROGINSKY (S.Z.), TRETIAKOV (I.I.). and SHEHTER (A.B.). **In Russian.** (Catalysis on mono-crystals. Acomparison between the activity of the sides of coppe crystals of different indices). *C. R. Acad. Sci.,-U.R.S.S.* (1955), 100, No. 3, 487-90.

1-04147 — ROLLETT (J.S.) and DAVIES (D.R.). **The calculation of structure factors for centrosymmetric monoclinic systems with anisotropic atomic vibration.** *Acta. Cryst.*-(1955), 8, No. 3, 125-9.

1-04148 — SCAVNICAR (S.) and GRDENIC (D.). **The crystal structure of trichlormercury oxonium chloride..** *Acta. Crys* (1955), 8, No. 5, 275-9.

1-04149 — SCHNEER (C.J.). **Polymorphism in one dimension.** *Acta. Cryst.* (1955), 8, No. 5, 279-86.

1-04150 — SCHUBERT (K.). **Enige Beispiele fur die Ortskorrelation der Elektronen in Kristallstruckturen.** (Some examples in the place correlation of electrons in crystal structures). *Acta. Cryst.* (1955), 8, No. 5, 289-90.

1-04151 — SIM (G.A.), ROBERTSON (J.M.) and GOODWIN (T.H.). **The crystal and molecular structure of benzoic acid.** *Acta. Cryst.* (1955), 8, No. 3, 157-65.

1-04152 — SMITH (J.V.). **Crystal data for spurrite, $5CaO.\ 2SiO_2.\ CO_2$.** *Acta. Cryst.* -(1955), 8, No. 5, 290.

1-04153 — STERNBERG (M.). **Etude cristallographique du diphénylpicryl-hydrazyle.** *C. R. Acad. Sci., Paris,* (1955), 240, 240, No. 9, 990-2.

1-04154 — THOMPSON (D.O.). **Temperature dependent creep in zinc crystals.** *J. Appl. Phys.* (1955), 26, No. 3, 280-5.

1-04155 — TIMMONS (C.F.) and WALLWORK (S.C.). **The structure of trans-aBdicyanostilbene, the alleged diphenylmaleidinitrile.** *Chem. and Ind.* (1955), No. 3, 62-3.

1-04156 — TISCHENKO (G.N.) and PINSKER (Z.G.). **In Russian.** (Electronic determination of the structure of $Cs_2\ Co\ Cl_4$). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 913-6.

1-04157 — TRILLAT (J-J.) TERAO (N.), TERTIAN (L.) et GERVAIS (H.). **Etude de phénomènes d'orientation cristalline par diffraction électronique et attaque ionique simultanées.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 1557-9.

1-04158 — TYNDALL (E.P.T.), ARTMAN (R.A.); WERT (C.A.) and EISNER (R.). **Creep of zinc crystals.** *J. Appl. Phys.* (1955), 26, No. 3, 286-93.

1-04159 — VON ELLER (G.). **Le photosommateur harmonique et ses possibilites (I).** *Bull. Soc. Franc. Min. Cryst.* (1955), No. l- 3, 157-213.

1-04160 — VOS (A.) and WIEBENGA (E.H.). **The crystal stuctures of P S** *Acta. Cryst.* (1955). 8, No. 4, 217-24.

1-04161 — WADSLEY (A.D.). **The crystal structure of chalcophanite $ZnMn_3O_7.\ 3H_2O$.** *Acta. Cryst.* (1955), 8, No. 3, 165-72.

1-04162 — WASER (J.). **Fourier transforms and scattering intensities of tubular objects.** *Acta. Cryst.* (1955), 8, No. 3, 142-51.

1-04163 — WHEATLEY (P.J.). **The crystal and molecular structure of 8 triazone..** *Acta. Cryst.* (1955), 8, No. 4, 224-7.

1-04164 — WHITTAKER (E.J.W.). **The diffraction of X-ray by a cylindrical lattice II.** *Acta. Cryst.* (1955), 8, No. 5, 261-5.

1-04165 — WHITTAKER (E.J.W.). **The diffraction of X-ray by a cylindrical lattice III.** *Acta. Cryst.* (1955), 8, No. 5, 265-72.

1-04166 — WINTER (A.). **Les limites de la formation du verre.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1878-80.

1-04167 — WORTHINGTON (C.R.) and TOMLON (S.G.). **Small-angle X-ray diffraction patterns of collagen.** *Nature, London,* (1955), 175, No. 4462, 811.

1-04168 — WRIGHT (G.T.). **Absolute quantum efficiency of photofluorescence of anthracene crystals.** *Proc. Phys. Sco. London, B.* (1955), 68, No. 4, 241-9.

E. Pure and Applied Chemistry

E1. GENERAL and PHYSICAL CHEMISTRY

1-04169 — ABRAHAM (B.M.) and FLOTOW (H.E.). **The heats of formation of uranium hydride, uranium deuteride and uranium tritide at 25°.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1446-8.

1-04170 — ADLER (S.J.) and NOYES (R.M.). **The mechanism of the permanganate-oxalate reaction.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2036-42.

1-04171 — ABE (T.), SHEPPARD (E.) and WRIGHT (I.S.). **Electrokinetic studies on fibrinogen. V. Determination of the isoelectric point by the streaming potential method.** *J. Phys. Chem.* (1955), 59, No. 3, 266-70.

1-04172 — ALEXANDER (L.) and DARIN (S.R.). **X-Ray diffraction study of four reinforcing carbon blacks.** *J. Chem. Phys.* (1955), 23, No. 3, 594-5.

1-04173 — ALDER (N.J.), FRANKEL (S.P.) and LEWINSON (V.A.). **Radial distribution function calculated by the Monte-Carlo method for a hard sphere fluid.** *J. Chem. Phys.* (1955), 23, No. 3, 417-9.

1-04174 — ALTSHULLER (A.P.). **Thermodynamic functions for silane.** *J. Chem. Phys.* (1955), 23, No. 4, 767.

1-04175 — ALTSHULLER (A.P.) and ROSENBLUM (L.). **Dielectric properties of some alkylsilanes.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 272-4.

1-04176 — AMDUR (I.) and MASON (E.A.). **Scattering of high velocity neutral particles. V. Neon-neon.** *J. Chem. Phys.* (1955), 23, No. 415-6.

1-04177 — AMELL (A.R.) and TEATES (TH.). **The threecomponent system benzaldehyde-water - acetic acid.** *J. Phys. Chem.* (1955), 59, No. 3, 285.

1-04178 — ANGEL (G.), LUNDEN (T.), DAHLEURUS (S.) and BARNNLAND (R.). **Influence of impurities in the electrolyte in chlorine-caustic electrolysis by the mercury cell process. IV. Investigation of the influence of metals on the cathodic current efficiency.** *J. Electrochem. Soc.* (1955), 102, No. 3, 124-30.

1-04179 — ARCHER (R.J.) and LA MER (V.K.). **The rate of evaporation of water through fatty acid monolayers.** *J. Phys. Chem.* (1955), 59, No. 3, 200-8.

1-04180 — ARPIARIAN (N.). **Action du nickel et du cobalt sur les phosphores ZnS (Au). Déplacement du niveau de Fermi par variation de la concentration.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 12, 1333-5.

1-04181 — ARNOLD (G.W.). **Comment on "color centers in smoky quartz.** *J. Chem. Phys.* (1955), 23, No. 3, 500-1.

1-04182 — ASTON (J.G.) and ZOLKI (T.P.). **The barrier hindering internal rotation in pentafluorochloroethane.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 804-5.

1-04183 — ASTON (J.G.), ZOLKI (T.P.) and WOOD (J.L.). **The thermodynamic properties and configuration of trimethylhydrazine identification and correction for a major impurity.** *J. Amer. Chem. Soc*, (1955), 77, No. 2, 281-4.

1-04184 — ASAI (M.), TSUBOI (M.), SHIMANOUCHI (T.) and MIZUSHIMA (S.). **Infrared spectra of polypeptides and related compounds. I.** *J. Phys. Chem.* (1955), 59, No. 4, 322-5.

1-04185 — BABBITT (J.D.). **Note on the fundamental law of diffusion.** *J. Chem. Phys.* (1955), 23, No. 3, 601-2.

1-04186 — BACTILE (A-M.). **Etude de la surtension du cadmium dans des solutions de sulfate de cadmium.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 7, 763-5.

1-04187 — BADEN (H.C.), WIBERLEY (S.E.) and BAUER (W.H.). **Formation of diborane during the slow oxidation of pentaborane.** *J. Phys. Chem.* (1955), 59, No. 3, 287-8.

1-04188 — BAGLEY (E.) and LONG (F.A.). **Two-state sorption and desorption of organic vapors in cellulose acetate.** *J. Amer. Chem. Soc*, (1955), 77, No. 8, 2172-8.

1-04189 — BAGRAMIAN (A.T.) and TZAREVA (Yu. S.). **In Russian.** (Internal potentials of electrolytical deposits of metals). *J. Phys. Chem., Moscow*, (1955), 29, No. 1, 185-93.

1-04190 — BAKER (M.C.), LYONS (P.A.) and SINGER (S.J.). **Velocity ultracentrifugation and diffusion of silicotungstic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2011-2.

1-04191 — BALESDENT (D.). **Sur une cause d'erreur dans l'étude expérimentale de certains équilibres chimiques faisant intervenir une solution solide.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 14, 1534-6.

1-04192 — BANUS (M.D.), McSHARRY (J.J.) and SULLIVAN (E.A.). **The sodium-sodium hydride-hydrogen system at 500-600°.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2007-10.

1-04193 — BARDHAN (S.) and ADITYA (S.). **Ionic equilibria in solution. I.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 102-4.

1-04194 — BARDHAN (S.) and ADITYA (S.). **Ionic equilibria in solution. II.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 109-12.

1-04195 — BARDHAN (S.) and ADITYA (S.). **Ionic equilibria equilibria in solution III.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 105-8.

1-04196 — BAROT (H.V.) and DESAI (C.M.). **Interfacial tension and complex formation. The system BaCl-alkali chloride-H_2O.** *J. Indian, Chem. Soc.* (1955), 31, No. 1, 61-2.

1-04197 — BAXENDAEL (J.H.) and SMITHIES (D.). **Radiation chemistry of aqueous benzene solutions.** *J. Chem. Phys.* (1955), 23, No. 3, 604.

1-04198 — BENOIT (R.). **Les liaisons de valence dans quelques composés binaires.** *J. Chim. Phys.* (1955), 52, No. 3, 201-12.

1-04199 — BENOIT (R.). **Etude paramagnétique des composés binaires.** *J. Chim. Phys.* (1955), 52, No. 2, 119-32.

1-04200 — BENSON (G.C.) and PATTERSON (D.). **Note on an analytical proof of Wulff's theorem in three dimentions.** *J. Chem. Phys.* (1955), 23, No. 4, 6770-2.

1-04201 — BENSON (S.W.) and RICHARDSON (R.L.). **A study of hysteresis in the sorption of polar gases by native and denatured proteins.** *J. Amer. Chem. Soc*, (1955), 77, No. 9, 2585-90.

1-04202 — BERNELIN (B.). **Note sur les phénomènes de floculation des particules charbonneuses dans les huiles de graissage sous l'influence de la température.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 21, 2073-5.

1-03203 — BERNHARD (S.A.). **A simple model of molecular in enzyme-substrate systems. I. Theory and applications to the system acetylcholinesterase-substrate.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1966-72.

1-04204 — BERNAHRD (S.A.). **A simple model of molecular specificity in enzyme-substrate systems. II. The correlation of the Michaelis constant with the inhibition constant.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1973-4.

1-04205 — BERTHIER (G.). **Configurations électroniques incomplètes. II. Etude par la méthode du champ moléculaire self-consistent de certains radicaux et biradicaux organiques.** *J. Chim. Phys.* (1955), 52, No. 2, 141-9.

1-04206 — BERTHIER (G.). **Détermination des coefficients d'autodiffusion par la méthode des échanges isotopiques héterogénes. II. Cas d'une résistance au transfert de la matière sur la surface de séparation des phases.** *J. Chim. Phys.* (1955), 52, No. 1, 41-7.

1-04207 — BIERMANN (W.J.) and YAMASAKI (R.S.). **Activity coefficients of aqueous hydrobromic acid solutions to four molal.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 241.

1-04208 — BIES (D.A.). **Ultrasonic investigation of a chemical kinetics problem:the dissociation of magnesium sulfate.** *J. Chem. Phys.* (1955), 23, No. 3, 428-34.

1-04209 — BIRDSALL (C.M.), JENKINS (A.C.), DIPAOLO (F.S.), BEATTIE (J.A.) and APT (C.M.). **Compressibilities of ozone, ozygen and zozne-oxygen mixtures and the thermodynamic quantities for pure ozone.** *J. Chem. Phys.* (1955), 23, No. 3, 441-52.

1-4210 — BITTKER (D.A.) and WALTERS (W.D.). **The thermal decomposition of trimethylene oxide.** *J. Amer. Chem. Soc. Chem. Soc.* (1955), 77, No. 6, 1429-34.

1-04211 — BREDIG (M.A.) JOHNSON (J.W.) and SMITH (W.T. **Miscibility of liquid metals with salts. I. The sodium-sodium halide systems.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 307-12.

1-04212 — BLACKALL (B.L.) and EASTHAM (A.M.). **Electrolyte catalysis. II. The mutarotation of tetramethylglucose in nitromethane.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2184-7.

1-04213 — BOOLH (F.). **Dielectric constant of polar liquids at high strengths.** *J. Chem. Phys.* (1955), 23, No. 3, 453-7.

1-04214 — BONNEMAY (M.) et PINEAUX (R.). **Sur une électrode de référence au chlorure d'argent utilisable dans les sels fondus.** *C. R. Acid. Sci., Paris*, (1955), 241, No. 18, 1774-6.

1-04215 — BONNEMAY (M.). **Sur la courbe de polarisaion cathodique de l'hydrogène sur platine platiné.** *J. Chim. Phys.* (1955), 52, No. 1, 48-9.

1-04216 — BONNMEY (M.). **Action du brome sur le comportement de l'électrode de platine comme électrode à "hydrogène".** *J. Rech.* (1955), No. 30, 194-8.

1-04217 — BONNER (O.D.), EASTERLING (G.D.), WEST (D.L.) and HOLLAND (V.F.). **Osmotic and activity coeficients of P-toluenesulfonic acid and P-ethylbenzenesulfonic acid and their relationship to ionexchange equilibria.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 242-4.

1-04218 — BONNICKSON (K.R.). **High temperature heat contents of aluminates of calcium and magnesium** *J. Phys. Chem.* (1955), 59, No. 3, 220-1.

1-04219 — BONNICKSON (K.R.). **High temperature heat contents of some titantes of aluminium, iron and zinc.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2152-4.

1-04220 — BOUDART (M.). **Heats of adsorption on metal surface.** *J. Chem. Phys.* (1955), 23, No. 4, 753-4.

1-04221 — BOUTILLON (G.), EYRAUD (CH.) et PRETTRE (M.). **Etude enthalpique des changements d'état d'une phase adsorbée.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 7, 756-8.

1-04222 — BOWEN (E.J.) and TANNER (D.W.). **The photochemistry of anthracenes. III. Inter-ralations between fluorescence dimerization, and photo-oxidation.** *Trans. Faraday. Soc.* (1955), 51, No. 5, 475-80.

1-04223 — BRAND (J.C.D.) and CAWTHON (T.M.). **The vibrational spectrum of methyl nitrate.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 319-23.

1-04224 — BRAY (P.J.) Cl Pure quadrupole resonances in acid chlorides and chlorates. *J. Chem. Phys.* (1955), 23, No. 4, 703-6.

1-04225 — BREDIG (M.A.), BRONSTEIN (H.R.) and SMITH (W.T.). **Miscibility of liquid metals with salts. II. The potassium-potassium fluride and cesium-cesium halide-systems.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1454-8.

1-4226 — BREGMAN (J.) and BUAER (S.H.). **An electron diffraction study of ketene dimer, methylketene dimer and B-propiolactone.** *J. Amer. Chem. Soc.* (1955), 77, No. 1955-65.

1-04227 — BROIDA (H.P.) and KOSTKOWSKI (H.J.). **Experimental evidence for the existence of abnormal OH rotational temperatures in lowpressure flames.** *J. Chem. Phys.* (1955), 23, No. 4, 754.

1-04228 — BROWN (I.) and SMITH (F.). **Liquid vapour equilibria VI. The systems acetonitrile+benzene at 45 C and acetonitrile +nitromethane at 60 C.** *Aist. J. Chem.* (1955), 8, No. 1, 62-7.

1-04229 — BUCKLES (R.E.) and BREMER (K.G.). **The effect of base on the ultraviolet absorption spectra of phenylactic acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 805-6.

1-04230 — BUDO (A.) and KOVACS (I.). **On the 4II State of the O_2+Molecule.** *J. Chem. Phys.* (1955), 2, No. 4, 751-2.

1-04231 — BUFF (F.P.). **Spherical interface. II. Molecular theory.** *J. Chem. Phys.* (1955), 23, No. 419-27.

1-04232 — BUFF (F.P.) and BROUT (R.). **Molecular formulation of thermodynamic functions encountered in solution theory.** *J. Chem. Phys.* (1955), 23, No. 3, 458-65.

1-04233 — BURTT (B.P.) and BAURER (TH.). **Effect of variations in source intensity on the alpha induced decomposition of ammonia.** *J. Chem. Phys.* (1955), 23, No. 3, 466-70.

1-04231 — BUTLER (T.C.), RUTH (J.M.) and TUCKER (G.F.). **The second ionization of 5,5-disubstituted derivatives of barbituric acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 1486-8.

1-04235 — BUTLER (A.F.) and GRUNWALD (E.). **Salt effects on nonelectrolytes in partially 'aqueous mixed solvents.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1706.

1-04236 — BUSNEL (R.) et DEGROIS (M.). **Observations de phénomènes se developpant dans les liquides soumis à des ultrasons en présence de divers gaz à des pressions variables.** *J. Chem. Phys.* (1955), 52, No. 3, 279-93.

1-04237 — CADBURY (W.E.). **The system sodium sulfate-sodium molybdate water.** *J. Phys. Chem.* (1955), 59, No. 3, 257-60.

1-04238 — CALLIS (C.F.), WAZER (J.R.) and METCALF (S.). **Structure and properites of the condensed phosphates. VIII.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1468-70.

1-04239 — CALLIS (C.F.), WAZER (J.R.) and METCALF (J.S.) **Structure and properties of the condensed phosphates. IX.** *J. Amer. Chem. Soc*, (1955), 77, No. 6, 1471-3.

1-04240 — CANDIDUS (E.S.) and TUOMI (E.). **Germanium-oxygen system.** *J. Chem. Phys.* (1955), 23, No. 3, 588.

1-04241 — CARNIGLIA (S.C.) and CUNNINGHAM (B.B.). **Vapor pressures of americium trifluoride and plutonium trifluoride.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1451-3.

1-04242 — CARNIGLIA (.C.) and CUNNINGHAM (B.). **The vapor pressure of americium metal.** *J. Amer. Chem. Soc*, (1955), 77, No. 6, 1502.

1-04243 — CASASSA (E.F.). **Light scattering from very long rod like particles and an application to polymerized fibrinogen.** *J. Chem. Phys.* (1955), 23, No. 3, 596-7.

1-04244 — CREF (R.). **Quelques remarques sur la théorie de l'effet Maxwell des solutions de macromolécules.** *J. Chem. Phys.* (1955), 52, No. 1, 52-9.

1-04245 — CHANU (J.) et LENOBLE (J.). **Sur une méthode optique d'étude de l'effet Soret dans les solutions ioniques.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 9, 949-51.

1-04246 — CHAPIRO (A.). **Action des rayons sur les polyméres à l'état solide. I. Réticulation du polyethylène.** *J. Chem. Phys.* (1955), 52, No. 3, 246-8.

1-04247 — CHALVET (H.) et CHALVET (O.). **Application de la méthode des abaques à l'étude des propriétés cancérogènes du 3,4, 9-10 dibenzopyrène.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 11, 1221-23.

1-04248 — CHALVET (O.) et PELTIER (J.). **Diagrammes moléculaires de quelques hydrocarbures aromatiques.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 17, 1709-71.

1-04249 — CHENG (P.Y.) and SCHACHMAN (H.K.). **Effect of pressure on sedimentation and compressibility measurements in the ultracentrifuge.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1498-501.

1-04250 — CHER (M.) and DAVIDSON (N.). **The kinetics of the oxygenation of ferrous iron in phosphoric acid solution.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 793-8.

1-04251 — CHEVNYK (N.G.). **In Russian.** (The application of the Geirovsky-Ikovich's equation to the discharge polarograms of metallic ions in melts on hard electrodes). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 495-8.

1-04252 — CHU (T.L.), LI (N.C.) and FUJII (C.T.). **Studies on iron (III) thiocyanate in diosane.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2085-7.

1-04253 — COFFIN (K.P.) and BAUER (S.H.). **The structures phenylboron dichloride, B-trichloroborazole and N-trimethylborazole as determined by electron diffraction.** *J. Phys. Chem.* (1955), 59, No. 3, 194-9.

1-04254 — COHEN (A.J.). **Impurity induced color centers in fused silica.** *J. Chem. Phys.* (1955), 23, No. 4, 765-6.

1-04255 — COHEN (A.J.). **Color centers in smoky quartz.** *J. Chem. Phys.* (1955), 23, No. 3, 589-90.

1-04256 — COLE (R.H.). **On the analysis of dielectric relaxation measurements.** *J. Chem. Phys.* (1955), 23, No. 3, 493-9.

1-04257 — COLE (R.H.). **On the dielectric constant of liquid hydrogen cyanide.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2012-3.

1-04258 — CONWAY (J.B.), SMITH (W.F.R.), LIDDELL (W.J.) and GROSSE (A.V.). **The production of a flame temperature of 5000 K.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2026-8.

1-04259 — CUNNINGHAM (G.L.) and T.S.). **The system sodium chlorite-sodium cloride-water at various temperatures.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 799-81.

1-04260 — COOPER (W.C.). **The polarographic behavior of dropping tin amalgam electrodes.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2074-6.

1-04261 — COOLEY (S.D.) and ANDERSON (R.S.). **Burning velocities in deuterium-bromine and hydrogen-bromine mixtures.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 235-7.

1-04262 — CORRIN (M.L.). **Low pressure adsorption of heptane on ferric oxide.** *J. Phys. Chem.* (1955), 59, No. 4, 313-7.

1-04263 — COULSON (J.M.) and DOMBROWSKI (N.). **Photography studies in chemical engineering research.** *J. Photogr. Sci. Section. B.* (1955), 3, No. 3, 88-94.

1-04264 — DAVID (M.H.), DINGLEDY (P.) and JOHNSTON (H.L.). **The vaporization of Tin and ZrN.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 304-6.

1-04265 — DAVIDENKOV (N.N.) and VASILIEV (D.M.). **In Russian.** (Thermoplastic after-effect in metals. I). *J. Tech. Phys., Moscow*, (1955), 25, No. 4, 671-9.

1-04266 — DANFORTH (W.E.). **Polarization in thorium oxide crystals.** *J. Chem. Phys.* (1955), 23, No. 3, 391-2.

1-04267 — DANK (M.) and BARBER (S.W.). **Low-temperature specific heats of vitreous and crystalline silica.** *J. Chem. Phys.* (1955), 23, No. 3, 597-8.

1-04268 — DARMOIS (G.) et DUMESNIL (E.). **Sur le lois de Raoult.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 6, 620-2.

1-04269 — DARMOIS (G.). **Sur l'hydratation des ions.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 12, 1341-3.

1-04270 — DAVIES (D.W.). **The inclusion of overlap in molecular orbital calculations on heterocyclic molecules.** *Trans. Faraday Soc.* (1955), 51, No. 5, 449-56.

1-04271 — DAVION (M.). **Equilibres de double décomposition dans les solvants mixtes et enthalpies libres des ions.** *C. R. Acad. Sci., Paris*, (1955), 260, No. 7, 751-4.

1-04272 — DAWSON (L.R.), SEARS (P.G.) and GRAVES (R.H.). **Solvents having high dielectric constants. II. Solutionss of alkali halides in N-methylacetamide from 30 to 60 .** *J. Amper. Chem. Soc.* (1955), 77, No. 7, 1986-9.

1-04273 — DE GRANDCHAMP-CHAUDUN (A.). **Influence du solvant sur le pouvoir rotatiore des sucres. Cas de l'alcool méthylique.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 9, 973-5.

1-04274 — DELIMARSKY (Yu.K.). **In Russian.** (Electrode potentials of metals in the molten salts). *J. Phys. Chem., Moscow*, (1955), 29, No. 1, 28-38.

1-04275 — DeTAR (D.F.). **Methods of obtaining rate constants for reactions of half order and of mixed half plus first order followed manometrically.** *J. Amer. Chem. Soc.* (1955), 77, No. 2103-5.

1-04276 — DENISON (J.T.) and RAMSEY (I.B.). **The free enegy, enthalpy and entropy of dissociation of some perchlorates in ethylene chloride and thylidene chloride.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2615-21.

1-04277 — DEMARCUS (W.C.). **Zero point energy of monatomic crystals.** *J. Chem. Phys.* (1955), 23, No. 3, 602.

1-04278 — DEPRIMA (C.R.) and PENNER (S.S.). **Invariance of integrated transmittance and total fractional transmission with experimental silt function.** *J. Chem. Phys.* (1955), 23, No. 4, 757-8.

1-04279 — DESHIMUKH (M.B.). **Joshi effect in relation to intermittent pulses.** *J. Chem. Phys.* (1955), 23, No. 3, 593.

1-04280 — DETWILER (D.P.) and FOX (W.M.). **Purification of gallium by zone-refining.** *J. Metals.* (1955), 7, No. 1, 205.

1-04281 — DEWING (E.W.). **Vapor pressures of the system sodium chloride-aluminum chloride.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2639-47.

1-04282 — DONNET (J-B.). et ROTH (R.). **Sur une méthode de préparation des membranes osmotiques permettant leur utilisation des polymères polydispersés.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 7, 770-2.

1-04283 — DOWS (D.A.), WHITTLE (.E.) and PIMENTEL (G.C.). **Infrared emission and absorption in an ammonia-oxygen diffusion flame.** *J. Chem. Phys.* (1955), 23, No. 499-502.

1-04284 — DOWLING (J.M.). **Substituted methanes XXI. Calculated and observed wave numbers, and calculated thermodynamic properties, for bromodeuteromethane and bromodideuteromethane.** *J. Chem. Phys.* (1955), 23, No. 4, 77–1.

1-04285 — DOUGLAS (T.B.), EPSTEIN (L.F.), DEVER (J.L.) and HOWLAND (W.H.). **Lithium: heat content from 0 to 900°, Triple point and heat of fusion and thermodynamic properties of the solid and liquid.** *J. Amer. chem. So.* (1955), 77, No. 8, 2144-.

1-04286 — DOUCET (Y.) et WATELLE (G.). **La floculation des colloides par des mélanges d'électrolytes.** *J. Chim. phys.* (1955), 52, No. 1, 65-76.

1-04287 — DOUCET (Y.) et COGNIAC (R.) **Sur la dissociation ionique de l'acétate de cuivre par la méthode des conductibilités.** *C. R. Acad. Sci. Paris*, (1955). 240, No. 9, 968-70.

1-04288 — DOUCET (Y.) et NETZER (CH.). **Mesure de l'actiivté et de la chaleur de mélange des solution de chlorure de potassium dans le nitrate de lithium fondu.** *C. R. Acad. Sci., Paris* (1955), 240, No. 19, 1208-10.

1-04289 — DOUCET (Y.) et WATELLE MARION (G.). **Sur la dissociation ionique de l'acétate de cuivre par la méthode d'absorption optique.** *C. R. Acad. Sci., Paris* (1955), 240, No. 15, 1616-8.

1-04290 — DREW (C.M.), McNESBY (J.R.) and GORDON (A.S.). **Kinetic study of the reaction between nitromethane and hydroxide ion to form methazonate ion.** *J. Amer. chem. Soc.* (1955), 77, No. 9, 2622-6.

1-04291 — DUNCAN (N.E.). and JANZ (G.J.) **Molecular structure and vibrational spectra of ethyl cyanide.** *C. chem. Phys.* (1955), 23, No. 3, 434-40.

1-04292 — DUNCAN (A.B.F.). **The electronic structure of hydrogen fluoride.** *J. Amer. chem. Soc.* (1955), 77, No. 8, 2107-10.

1-04293 — DUNLOP (A.K.) **Melting point of carbon tetrachloride.** *J. Amer. chem. Soc.* (1955), 77, No. 7, 2016-7.

1-4294 — DUCHESNE (J.) and MONFILS (A.) **Radio-frequency vibrational absorption in piezoelectric crystals.** *J.Chem. Phys.*(1955), 23, No. 4, 762.

1-04295 — DUNCAN (J.F.). **Enthalpies and entropies of ion-exchange reactions.** *Aust. J. Chem.* (1955), 8, No. 1, 1-20.

1-04296 — DWYER (F.P.), GYARFAS (E.C.) and MELLOR (D.P.). **The resolution and racemization of potassium ethylenediaminetera-acetatocobaltate (III)** *J. phys. Chem.* (1955), 59, No. 4, 296-7.

1-04297 — BASTHAM (A.M.), BLACKALL (E.L.) and LATREMOUILLE (G.A.). **Electrolytic catalysis. I. The mutarotation of glucose in pyridine.** *J. Amer. chem. Soc.* (1955), 77, No. 8, 2182-4.

1-04298 — ELLINGER (F.H.), HOLLEY (C.E.), M INTEER (B.B.), PAVONE (D.), POTTER (R.M.), STARITZKY (E.) and ZACHARIASEN (W.H.). **The preparation of some properties of magnesium hydride.** *J. Amer. chem. Soc.* (1955), 77, No. 9, 2647-8.

1-04299 — EMSCHWILLER (G.), COHN (CH.) et LEGROS (J.). **Application de l'osmose aux solutions aqueuses des ferroaquopentacyanures.** *C.R. Acad. Sci.,Paris* (1955),240, No.19,1213-5.

1-04300 — EVANS (A.G.), PRICE (A.) and THOMAS (J.H.). **The effect of solvents on the ionization of organic halides. II. Ionization of organic halides in acetic and formic acids.** *Trans. Faraay. Soc.* (1955), 51, No. 5, 481-90.

1-04400 — FAGLEY (T.F.) and KLEIN (E.). **The rate of reaction of ethyllithium and anisole.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 786-90.

1-04401 — FELTZIN (J.), RESTAINO (A.J.) and MESROBIAN (R.B.). **The kinetics of the catalyzed decomposition of diazohydrocarbons.** *J. Amer. chem. Soc.*)1955), 77, No. 1, 206-10.

1-04402 — FERNANDEZ (J.), MYERS (R.J.); and GWINN (W.D.). **Microwave spectrum and planarity of the ring of trimethylene oxide.** *J. Chem. Phys*, (1955), 23, No. 4, 758-9.

1-04403 — FERRARO (J.R.), KATZIN (L.I.) and GIBSON (G.). **The reaction of thorium nitrate tetrahydrate with nitrogen oxides. Anhydrous thorium nitrate.** *J. Amer. chem. Soc.* (1955), 11, No. 2, 327-9.

1-04404 — FINE (J.), GOLDSTEIN (J.H.) and SIMMONS (J.W.). **Microwave spectrum of** s-trans **acrolein.** *J. chem. Phys.* (1955), 23, No. 3, 601.

1-04405 — FRANKLIN (A.D.), MULDAWER (L.) and FLANDERS (P.) **The nature of "r-Feo".** *J. phys. Chem.* (1955), 59, No. 4, 340-3.

1-04406 — FRANCES (S.) and OLSON (A.R.) **Some salt effects on t- butyl chloride and t-butyl bromide solvolyses in aqueous acetone solutions.** *J. Amer. chem. Soc.* (1955), 77, No. 6, 1412-7.

1-04407 — FRANCE (W.L.) and DICKEY (F.P.).**Fine structure of the 2.7 micron carbon dioxide rotation-bivration band.** *J. chem. Phys.* (1955), 23, No. 3, 471-4.

1-04408 — FREEMAN (G.R.) and WINKLER (C.A.). **The reaction of active nitrogen with ammonia.** *J. phys. Chem.* (1955), 59, No. 4, 371-3.

1-04409 — FREILING (E.C.) **Ion exchange as a separation method. IX. Gradient elution theory.** *J. Amer. chem. Soc.* (1955), 77, No. 8, 2067-71.

1-04410 — FRIEDMAN (L.). **Mass spectrum of lithium iodide.** *J. chem. Phys.* (1955, 23, No. 3, 477-82.

1-04411 — FORSTER (L.). **The effect of solvent of the visible absorption spectrum of biacetyl.** *J. Amer. chem. Soc.* (1955), 77, No. 6, 1417-21.

1-04412 — FURST (M.) and KALLMANN (H.). **Flourescent behaviour of solutions containing more than one solvent.** *J. Chem. Phys.* (1955), 23, No. 4, 607-12.

1-04413 — GANZ (E.W.) **Resistance and polarization in a storage battery.** *J. electrochem. Soc.* (1955), 102, No. 3, 99-101.

1-04414 — GARINO-CANINA (V.). **Sur un nouveau phénomène au sujet de la bande d'absorption à 2 400 A et de la luminescence de la silice vitreuse.** *C. R. Acad. Sci., Paris.* (1955), 240, No. 12, 1331-3.

1-04415 — GELLES (E.) and PITZER (K.S.). **Magnetic catalysis of decarboxylation and other reactions.** *J. Amer. chem. Soc.* (1955), 77, No. 7, 1974-8.

1-04416 — GESSER (H.). **The photolysis of ammonia in the presence of propane and oxygen.** *J. Amer. chem. Soc.* (1955), 77, No. 9, 2626-9.

1-04417 — GELLER (S.), MATTHIAS (B.T.) and GOLDSTEIN (R.). **Some new intermetallic compounds with the B-wolfram structure.** *J. Amer. chem. Soc.* (1955), 77, No. 6, 1502-4.

1-04418 — GHOSH (B.N). **Derivation of a new expression connecting surface conductivity with the true and apparent zera-potentials of particles forming a diaphragm.** *J. Indian chem. Soc.* (1955), 32, No. 2, 69-71.

1-04419 — GHOSH (B.N.), RAY (K.C.) and RAYCHOWDHURY (P.B.). **An explanation of the variation of electrophoretic velocity of oil droplets observed by Mooney on the basis of surface conductivity correction.** *J. Indian chem. Soc.* (1955), 31, No. 1, 29-31.

1-04420 — GILKERSON (W.R.) and DAVIDSON (N.). **On the structure of a detonation front.** *J. chem. Phys.* (1955), 23, No. 4, 687-92.

1-04421 — GILBERT (J.B.), OTEY (M.C.) and HEARON (J.Z.). **Association constants of cobalt-glycine and cobalt-glycylglycine complexes in aqueous solution.** *J. Amer. chem. Soc.* (1955?), 77, No. 9, 2599-604.

1-04422 — GILMAN (J.J.). **Study of a new mode of plastic deformation in zinc crystals.** *J. Metals.* (1955), 7, No. 1, 206.-14.

1-04423 — GIACOMO (A.D.) and SMYTH (C.P.). **The dipole moments and molecular structures of some highly fluorinated hydrocarbons and ethers.** *J. Amer. chem. Soc*, (1955), 77, No. 2, 774-7.

1-04424 — GLEIM (V.G.) **InRussian.** (The general theory of the loss of moisture from boiling solutions). *Zh. frikl. Khim, Leningr.* (1955),28, No. 1, 12-20.

1-04425 — GLOVER (H.G.). **The divisional mobile laboratory.** *Trans.-Instn. Min. Engrs. London*, (1955), 114, No. 4, -319-36.

1-04426 — GLASS (R.A.). **Chelating agents applied to ionexchange separations of americium and curium.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 807-9.

1-04427 — GORBACHEV (S.V.) and VABEL (Ya.I.). **In Russian.** (Kinetics of the electrochemical oxidation of x-naphthoquinone and of its mixtures with naphthalsne). *J. Phys. Chem., Moscow.* (1955), 29, No. 1, 23-7.

1-04428 — GORBACHEV (S.V.) and VABEL-(Ya.I.).-**In Russian.** (Kinetics of the elctrochemical oxidation of naphthalene in acetic acid medium). *J. Phys. Chem., Moscow*, (1955), 29, No. 1, 15-22.

1-04429 — GOUDOT (A.). **Energie d'activation de la réaction et spécificité de l'ion métallique actif du catalyseur.** *C. R. Acad. Sci., Paris*, (1855),-240, No. 9, 975-7.

1-04430 — GOUDOT (A.). **Transport de charges entre métal et substrat dans l'hydrolyse d'un dipeptide.** *C. R. Acad. Sci., Paris,*-(1955), 240, No. 7, 778-80.

1-04431 — GOMER (R.) and INGHRAM (M.G.). **Applications of field ionization to mass spectrometry.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 500.

1-04432 — GROTH (W.E.) and OLDENBREG (O.). **Dissociation by impacts of the second kind.** *J. Chem. Phys.*-(1955),-23, No. 4, -729-31.

1-04433 — GREENWOOD (H.H.). **Some comments on the frontier orbital theory of the reactions of conjugated molecules.** *J. Chem. Phys.* (1955), 23, No. 4, 756-7.

1-04434 — GREGOR (H.P.). LUTTINGER (L.B.) and LOEBL (E.M.). **-Metal-polyelectrolyte complexes. II. Complexes of copper with cross-linked polyacrylic and polymethacrylic acids.** *J. Phys, Chem.* (1955), 59, No. 4, 366-8.

1-04435 — GREINER (E.S.). **Plastic deformation of germanium and silicon by torsion.** *J. Metals.* (1955), 7, No. 1, 203-5.

1-04436 — GREENWODD (H.H.). **Charge shifts and the reactions of conjugated molecules.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2055-7.

1-04437 — GREGORY (N.W.) and MOHR (R.H.). **The Equilibrium $2\text{-LiOH(S)}=\text{Li}_2\text{O(S)}+\text{H}_2\text{O(g)}$.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2142-4.

1-04438 — GRIFFING (V.) and SETTE (D.). **Luminescence produced as a result of intense ultrasonic waves.** *J. Chem. Phys.* (1955), 23, No. 3, 503-9.

1-04439 — GRUBB (W.T.) and OSTHOFF (R.C.). **Kinetics of polymerization of a cyclic dimethylsiloxane.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1405-11.

1-04440 — GUENTHER (W.B.), WHITEMAN (C.A.) and WALTERS (W.D.). **Acetone formation in the biacetyl pyrolysis.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2191-2.

1-04441 — GUREVICH (I.E.). **In Russian.** (Cathodic polarization during the galvanic tin-plating in chloride electrolytes). *Zh. Prikl. Khim., Leningr*, (1955), 1955). 28, No. 3, 285-90.

1-04442 — GULBRANSEN (E.A.) and ANDREW (K.F.). **Solubility and decomposition pressures of hydrogen in alpha-zirconium.** *J. Metals.* (1955), 7, No. 1, 136-44.

1-04443 — GUPTA (D.R.) and BHATTACHARYA (A.K.). **Studies on the velocity of flow of solvents through chromatographic columns III. Relation between volume of flow of the solvent per unit time and the geitht of the adsorbent columns.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 123-6.

1-04444 — HALPERN (J.) and PETERS (E.). **Mechanism of the catalytic activation of molecular hydrogen by metal ions.** *J. Chem. Phys.* (1955), 23, No. 3, 605-.

1-04445 — HAMM (R.E.) and PERKINS (R.H.). **Complex ions of chromium. V. Reactions of malonate ion with chromium (III.)** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2083-5.

1-04446 — HAMANN (S.D.). **The behaviour of fluids of quasi-spherical molecules IV. Concerning Troutons and Hilderbrand's rules.** *Aust. J. Chem.* (1955), 8, No. 1, 21-5.

1-04447 — HARNED (H.S.), PARKER (H.W.) and BLANDER (M.). **The diffusion coefficients of lithium and potassium perchlorates in dilut aquous solutions at 25 .** *J. Amer. Chem. Soc.* (1955), 77, No. 2071-3.

1-04448 — HARNED (H.S.) and GARY (R.). **The activity coefficient of hydrochloric acid in concentrated aqueous higher valence type chloride solutions at 25 II.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1994-5.

1-04449 — HARE (E.F.) and ZISMAN (W.A.). **Autophobic liquids and the properties of their adsorbed films.** *J. Phys. Chem.* (1955), 59, No. 4, 335-40.

1-04450 — HARNED (H.S.) and PARKER (H.W.). **The diffusion coefficient of calcium chloride in dilute and moderately dilute solutions at 25°.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 265-6.

1-04451 — HASKINS (J.R.), HELLER (G.) and MILLER (E.). **Equivalent circuit for a coil cell used in titremetry.** *J. Chem. Phys.* (1955), 23, No. 4, 755-6.

1-04452 — HEARON (J.Z.) and GILBERT (J.B.). **New methods for the calculation of association constants of complex ion systems.** *J. Amer. Chem. Soc.* (1955), 77, -No. 9, 2594-9.

1-04453 — HEIDT (L.J.) and BERESTECKI (J.). **Optical studies of cerous solutions.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2049-54.

1-04454 — HELLWIG (K.) and ANDERSON (R.C.). **Calculations of burning velocities for hydrogen-bromine and hydrogen- chlorine flames.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 232-4.

1-04455 — HERMAN (R.) and WALLIS (R.F.). **Influence of vibration rotation interaction on line instensities in vibration-rotation bands of diatomic molecules.** *J. Chem. Phys.* (1955), 23, No. 4, 637-46.

1-04456 — HENKEL (J.H.). **Equation of state and the thermal dependence of the elastic coefficients of crystalline argon.** *J. Chem. Phys.* (1955), 23, No. 4, 681-7.

1-04457 — HEY (D.H.) and WILLIAMS (G.H.). **Methyl and phenyl affinities of aromatic compounds.** *J. Chem. Phys.* (1955), 23, No. 4, 757.

1-04458 — HENTZ (R.R.). **The mechanism of hydrogen formation in radiolysis of cyclohexane.** *J. Phys, Chem.* (1955), 59, No. 4, 380-1.

1-04459 — HIBBARD (B.B.) and SCHMIDT (F.C.). **Physical chemical studies of solutions in anhydrous ethylendiamine. I.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 225-7.

1-04460 — HIGGINS (T.H.S.) and RAW (C.J.G.). **Problem of molecular association in liquid boron trifluoride.** *J. Chem. Phys.* (1955), 23, No. 3, 606.

1-04461 — HILL (J.J.) and SCHWED (P.). **Experimental study on the mechanism of thermoluminescence in irradiated sodium chloride.** *J. Chem. Phys.* (1955), 23, No. 4, 652-8.

1-04462 — HILL (T.L.). **Molecular clusters in imperfect gases.** *J. Chem. Phys.* (1955), 23, No. 4, 617-22.

1-04463 — HILL (T.L.). **Theory of protein solutions I.** *J. Chem. J. Chem. Phys.* (1955), 23, No. 4, 623-36.

1-04464 — HIRAYAMA (K.). **Absorption spectra and chemical structure. III. Effects of substituents and structure.** *J. Amer. Chem. Soc.* (1955), 77, 2, 382-3.

1-04465 — HIRAYAMA (K.). **Absorption spectra and chemical structure-II. Solvent effect.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 379-81.

1-04466 — HIRT (R.C.) and SCHMITT (R.G.). **Observed n-π bands in the ultraviolet absorption solution spectra of amono asymmetric traizines.** *J. Chem. Phys.* (1955), 23, No. 3, 600.

1-04467 — HISATSUNE (I.C.) and EGGERS (D.F.). **Infrared intensities and bond moments in formaldehyde.** *J. Chem. Phys.* (1955), 23, No. 3, 487-92.

1-04468 — HOLLAND (R.) and SMYTH (C.P.). **The Dielectric properties and molecular structure of hexamethyldisiloxane.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 268-71.

1-04469 — HOLTZCLAW (H.F.). **Polarographic behavior of isomeric inorganic coordination compounds.** *J. Phys. Chem.* (1955), 59, No. 4, 300-4.

1-04470 — HOLDEN (J.S.) and HARRIS (G.M.). **Kinetics of the carbonate exchange and racemization reactions of carbonato-bis (ethylenediamine) cobalt (III) ion.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1934-8.

1-04471 — HORING (D.E.) and OSBERG (W.E.). **Infrared spectrum and the structure of the low temperature phases of crystalline HCI, HBr and HI.** *J. Phys. Chem.* (1955), 23, No. 4, 662-70.

1-04472 — HORNING (J.F.) and HIRSCHFELDER (J.O.). **Magnetic shielding of nuclei in molecules by a variational method.** *J. Chem. Phys.* (1955), 23, No. 3, 474-6.

1-04473 — HORTH (A.) and RINFRET (M.). **A new critical volume effect in high polymer solutions.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 503.

1-04474 — HOSLER (W.T.). **Proposed structure of certain spinels at high temperature.** *J. Chem. Phys.* (1955), 23, No. 4, 764.

1-04475 — HOWALD (R.A.) and WILLARD (J.E.). **Exchange reactions of SnC14 with CH1 and organic chlorides.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2046-9.

1-04476 — HSIAO (L.) and DUNNING (H.N.). **A comparative study of non-ionic detergent adsorption by radiotracer, spectrophotometric and surface tension methods.** *J. Phys. Chem.* (1955), 59, No. 4, 362-6.

1-04477 — HUBER (E.J.), HOLLEY (C.E.). **The heat of combustion of gadolinium.** *J. Amer. Chem. Soc.* (1955), 77, No.6,1444-5.

1-04478 — HUFFSTULER (M.C.), RODE (J.A.) and ANDERSON (R.C.). **Effect of diluents on burning velocities in hydrogen-bromine mictures.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 809-10.

1-04479 — HUSH (N.S.) and BLACKLEDGE (J.). **Electron interaction in hydrocarbon multiple ions.** *J. Chem. Phys.* (1955), 23, No. 3, 415-7.

1-04480 — IZATT (R.M.), FERNELIUS (W.C.) and BLOCK (B.P.). **Studies on coordination 'compounds. XIV. The determina- and cerium(III) with the acetylacetonate ion.** *J. Phys. Chem.* (1955), 59, No. 3, 235-7.

1-04481 — JAFFE (H.H.). **On the separation of inductive and mesomeric effects by molecular orbital theory.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 274-80.

1-04482 — JANSEN (J.) and DAWSON (L.M.). **On intermolecular forces and the crystal structures of the rare gases.** *J. Chem. Phys.* (1955), 23, No. 3, 482-6.

1-04483 — JDANOV (S.P.). **In Russian.** (Influence of dehydration and hydration of the surface of porous glasses on their absorptive properties). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 6, 1115-8.

1-04484 — JESSUP (R.S.), McCOSKEY (E.E.) and NELSON (R.A.). **The heat of formation of tetrafluoromethane.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 244-5.

1-04485 — JONASSEN (H.B.). **Isomerism in inorganic chemistry: introductory remarcs.** *J. Phys. Chem.* (1955), 59, No. 4, 289.

1-04486 — JONASSEN (H.B.) and SISTRUNK (TH.O.). **The factors affecting the directive influence of the nitro group in the nitro complexes of palladium (II). III. Change in electronegativity of the halide group.** *J. Phys. Chem.* (1955), 59, No. 4, 290-3.

1-04487 — JORTNER (J.) and STEIN (G.). **Electrons in solutions** *Nature, London,* (1955), 175, No. 4464, 893-4.

1-04488 — JOLIET (J.F.). **Sur la densité et la température de fusion des carbures saturés normaux.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 970-2.

1-04489—JOSIEN (M.L.) et LASCOMBE (J.). **Influence des solvants sur la vibration de valence C+O de l'acétophénone et la cyclohexanone.** *J. Chem. Phys.* (1955), 52, No. 2, 162-8.

1-04490 — JOSIEN (M.L.) et DESCHAMPS (J.). **Etude infra-rouge et diagrammes moléculaires de quelques paraquinones polycycliques.** *J. Chem. Phys.* (1955), 52, No. 3, 213-22.

1-04491 — JOLIET (J.F.). **Sur la température de fusion des composés des chaines normales.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1214-6.

1-04492 — JOLY (J.). **Cinétique de gonflement axial de la rayonne viscose.** *C. R. Acad. Sci., Paris,* (1955), 250, No. 14, 1529-31.

1-04493 — JULG (A.). **Structure électronique de l'heptafulvène Etude par la méthode du champ moléculaire self-consistant.** *J. Chem. Phys.* (1955), 52, No. 1, 50-2.

1-04494 — KAMECKI (J.), ZEMBRUA (Z.) and TRAU (J.). (J.). **The passivation of lead anodes in phosphoric acid solutions.** *Bull. Acad. Poloniase. Soc.* (1955), 3, No. 1, 41-6.

1-04495 — KAMECKI (J.) and ZEMBURA (Z.) and TRAU (J.). **The anodic behaviour of lead anodes in phosphoric acid solutions.** *Bull. Acad. Polonaise, Soc.* (1955), 3, No. 1, 37-40.

1-04496 — KAZI (H.). **Interfacial tension and complex formation of metal sulphates.** *J. Indian, Chem. Soc.* (1955), 31, No. 1, 63,4.

1-04497 — KAUNFMAN (F.) and KELSO (J.R.). **Reaction between nitric and nitrous oxide.** *J. Chem. Phys.* (1955), 23, No. 3, 602-3.

1-04498 — KATCHALSKI (E.) SHALITIN (Y.) and GEHATIA (M.). **Theoretical analysis of the polymerization kinetics of N-carboxy-x-amino acid anhydrides.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1925-34.

1-04499 — KAGARISE (R.E.). **Spectroscopic studies on the soaps of phenylstearic acid I. Infrared absorpton spectra and the hydrolysis of soap films.** *J. Phys. Chem.* (1955), 59, No. 3, 217-7.

1-04500 — KATTI (P.K.) and WANCHOO (V.N.). **Depolarizations of light scattered by polymolybdates in acid and basic solutions.** *J. Chem. Phys.* (1955), 23, No. 4, 760-1.

1-04501 — KELLER (S.P.) and CLEMMONS (J.J.). **Thermoluminescence and fluorescence in alkali halide crystals induced by soft X-ray.** *J. Chem. Phys.* (1955), 23, No. 3, 586-7.

1-04502 — KEENAN (TH.K.), PENNEMAN (R.A.) and SUTTLE (J.F.). **Experimental determinations of the diffusion coefficients of gases through wather'nitrogen and argon.** *J. Phys. Chem.* (1955), 59, No. 4, 382-3.

1-04503 — KEENAN (TH.K), PENNEMAN (R.A.) and SUTTLE (J.F.). **Isotopic exchange reactions of americium.** *J. Phys. Chem.* (1955), 59, No. 4, 381.

1-04504 — KETELAAR (J.A.A.) and HOOGE (F.N.). **Simultaneus vibrational transitions in liquids.** *J. Chem. Phys.* (1955), 23, No. 4, 749.

1-04505 — KEEFER (R.M.) and ANDREWS (L.J.). **The heats, free energies and entropies of formation of alkylbenzene-iodine complexes.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2164-8.

1-04506 — KERNAHAN (J.L.) and SIENKO (M.J.). **Residual paramagnetism and the susceptibility of some isoelectronic cobaltammines.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1987-80.

1-04507 — KING (E.G.). **Low temperature heat capacities and entropies at 398.16 K of some titanates of aluminium, calcium, lithium and zinc.** *J. Amer. Chem. Sco.* (1955), 77, No. 8, 2150-2.

1-04508 — KING (E.G.). **Low temperature heat capacity and entropy at 298.16 K. of analcite.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2192-3.

1-04509 — KINGER (W.D.), HALDEN (F.A.) and KURKJAIN (C.R.). **Base exchange capacity of talc.** *J. Phys. Chem.* (1955), 59, No. 4, 378-80.

1-04510 — KING (E.G.). **Heat capacities at low temperatures and entropies at 298.16 of crystalline calcium and magnesium aluminates.** *J. Phys. Chem.* (1955), 59, No. 3, 218-9.

1-04511 — KALOUSE (G.L.). **A comparison of sorption characteristics of some minerals having a layer structure** *J.. Phys. Chem.* (1955), 59, No. 3, 287.

1-04512 — KLOTZ (I.M.), URQUHART (J.M.), KLOTZ (T. A.) and AYERS (J.). **Slow intramolecular changes in copper complexes of serum albumin. The role of neighboring groups in protein reactions.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1910-25.

1-04513 — KLEPPA (O.J.). **A thermodynamic study of liquid metallic solutions. VI. Calorimetric investigations of the systems bismuth-lead, cadmium-tin and tin-zinc.** *J. Phys. Chem.* (1955), 59, No. 4, 354-61.

1-04514 — KNIGHT (S.B.), WALLICK (R.H.) and BALCH (C.). **The ultraviolet absorption spectra and the dissociation constants of the monochloroquinolines and the monomethylquinolines.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2577-9.

1-04515 — KRUH (R.) and DWIGGINS (C.W.). **Coordination of copper (11) in copper 8-hydroxyquinolinate dihydrate.** *J. Amer. Chem. Soc.* (1955), 77, No. 4, 806.

1-04516 — KRUEGER (H.) an HERSH (H.N.). **Autoradiography determination of the self-diffusion of silver.** *J. Metals.* (1955), 7, No. 1, 125-6.

1-04517 — KRAUS (G.). **The heat of immersion of carbon black in water methanol and n-hexane.** *J. Phys. Chem.* (1955), 59, No. 4, 343-5.

1-04518 — STRANKS (D.R.). **Kinetics of isotopic exchange reacreactions. The exchange between free carbonate ion and carbonatepentammine cabaltic complex ion.** *Trans. Faraday, Soc.* (1955), 51, No. 5, 505-13.

1-04519 — KUBOYAMA (A.) and NAGAKURA (S.). **On the binding energies of some molecular compounds between** p-benzoquinone and various aromatic substances. *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2644-6.

1-04520 — KWAN (T.). **Activation energy and entropy for adsorption.** *J. Phys. Chem.* (1955), 59, No. 3, 285-6.

1-04521 — LAIDLER (K.J.). **The influence of pH on the rates of enzyme reactions. I. General theory.** *Trans. Faraday, Soc.* (1955), 51, No. 5, 528-93.

1-04522 — LE FEVERE (R.J.W.) and RAO (A.A.S.N.). **The dipole moments of bromobenzene, and iodobenzene as vapours.** *Aust. J. Chem.* (1955), 8, No. 1, 140-2.

1-04523 — LAGRENAUDIE (J.). **Proprétés des semi-conducteurs composés B-Al.** *J. Chem. Phys.* (1955), 52, No. 1, 34-7.

1-04524 — LAUTOUT (M.). **Spectre d'émission du quartz fondu irradié par les rayons X. Role des impuretés et de l'état vitreux.** *J. Chem. Phys.* (1955), 52, No. 2, 176-8.

1-04525 — LAUTOUT (M.). **Photostimulation et coloration du quartz fondu irradié par les rayons X ou v.** *J. Chem. Phys.* (1955), 52, No. 3, 267-71.

1-04526 — LAUTOUT (M.). **Spectre d'absorption et courbe de thermoluminescence du quartz fondu irradié par les rayons X ou v.** *J. Chem. Phys.* (1955), 52, No. 3, 259-66.

1-04527 — LAUTOUT (M.). **Luminescence du quartz fondu sous l'action des radiations ionisantes.** *J. Chem. Phys.* (1955), 52, No. 2, 169-75.

1-04528 — LALLEMAND (A.) et DUCHESNE (M.). **Sur l'évolution et la conservation de l'effet photoélectrique d'une couche antimoinecésium placée dans le vide.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1329-31.

1-04529 — LEVY (P.W.). **Reactor and gamma-ray induced coloring in crystalline quartz and corning fused silica.** *J. Chem. Phys.* (1955), 23, No. 4, 764-5.

1-04530 — LEFEBVRE (R.) and MOSER (C.). **Towest singlet exited levels of naphthalene II.** *J. Chem. Phys.* (1955), 23, No. 4, 754-5.

1-04531 — LEBOWITZ (G.G.) and BAUER (S.H.). **Electron diffraction -etermination of lattice parameters of polycrystalline specimens giving broad diffraction peaks. II. A study of nickel oxide.** *J. Phys. Chem.* (1955), 59, No. 3, 214-7.

1-04532 — LEVY (M.) and SZWARC (M.). **Reactivities of aromatic hydrocarbons toward methyl radicals.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1949-55.

1-04533 — LEVY (J.B.) and ADRAIN (F.J.). **The thermal decomposition of nitrate esters. III.** n-propyl nitrate. *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2105-6.

1-04534 — LIGH (C.H.), SZWARC (M.) and BIGELEISEN (J.). **The Rate of decomposition of ethane into methyl radicals.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2193-4.

1-04535 — LE FEVRE (R.J.W.) and RAO (A.A.S.N.). **The calculation of atomic polarization sfor benzene and certain other polyatomic molecules.** *Aust. J. Chem.* (1955), 8, No. 1, 39-50.

1-04536 — LEBY (A.) and KURZ (P.F.). **Stability of carbon monoxidehydrocarbon-air flames.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1459-61.

1-04537 — LESBRE (M.), MAZEROLLES (P.) et VOIGT (D.). **Etude magnétooptique des tétra-alcolgermanes.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 622-4.

1-04538 — LENORMANT (H.) et DE LOSE (C.). **Effet de l'hydratation sur le spectre infrarouge de l'acide désoxyribonucléique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1327-8.

1-04539 — LEACH (S.). **Résonance de Fermi dans le spectre d'émission de benzène.** *J. Chem. Phys.* (1955), 52, No. 1, 12-23.

1-04540 — LEIDHEISER (H.) and COOK (F.H.). **Formation of photographic positives on strained sigle crystals of silver chloride.** *J. Chem. Phys.* (1955), 23, No. 3, 595.

1-04541 — LIBOWITZ (G.G.) and BAUER (S.H.). **Electron diffraction determination of lattice parameters of polycrystalline specimens giving braod diffraction peaks. I. Discussion of technique and analysis of errors.** *J. Phys. Chem.* (1955), 59, No. 3,209-14.

1-04542 — LIVINGSTON (R.). **A metastable form of chlorophyll in fluid solutions.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2179-82.

1-04543 — LI (CHU (T.) and WEISMANN (T.J.). **The association of some diaryl-2-thienylmethyls.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2189-90.

1-04544 — LI (J.C.M.) and CHANG (P.). **Self-diffusion coefficient viscosity in liquids.** *J. Chem. Phys.* (1955), 23, No. 3, 518-20.

1-04545 — LIPPINCOTT (E.R.). **Derivation of an internuclear potential function from a quantum mechanical model.** *J. Chem. Phys.* (1955), 23, No. 3, 603.

1-04546 — LORMEAU-LOUSTAU (S.). **Emission de rayonnement ultravioltet dans les mélanges gazeux soumis à l'action des particules** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 768-70.

1-04547 — LOGFIELD (J.E.) and WALTERS (W.D.). **The radical sensitized decomoosition of mixtures of acetaldehyde and formaldehyde.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 810-2.

1-04548 — LUDKE (W.O.), WIBERLEY (S.F.), GOLDENSON (J.) and BAUER (W.H.). **Mechanism of peptization of aluminium soap-hydrocarbon gels upon infrared studies.** *J. Phys. Chem.* (1955), 59, No. 3, 222-5.

1-04549 — LUTWACK (R.) and NEIMANN (C.). **The evaluation of enzymesubstrate dissociation constants.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2648-9.

1-04550 — LUTTON (E.S.). **Pictorial proof of** α (55°) **and** β (64°) **M.P. levels for tristearin.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2646-7.

1-04551 — LYNN (S.), MASON (D.M.) and CORCORAN (W.H.). **Ionization in solutions of nitrogen dioxide in nitric acid from optical absorbance measurements.** *J. Phys. Chem.* (1955), 39, No. 3, 238-40.

1-04552 — MATLOW (S.L.). **Study of the structure of chlorophyl prototypes.** *J. Chem. Phys.* (1955), 23, No. 4, 673-80.

1-04553 — MADAN (M.P.). **Exp. six potential and properties of gases.** *J. Chem. Phys.* (1955), 23, No. 4, 763-4.

1-04554 — MARON (S.M.) and LOU (R.L.H.). **The scattering of light by sucrose solutions.***J. Phys. Chem.* (1955), 59, No. 3, 231-4.

1-04555 — MATRELL (A.E.). **The effect of ligand isomerism on the stability of metal chelate compounds.** *J. Phys. Chem.* (1955), 59, No. 4, 308-12.

1-04556 — MASLOV (P.G.). **In Russian.** (Single formulae for the determination of the Kerr constants of n-alkanes and n-alkenes). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 3, 328-30.

1-04557 — MATEROVA (E.A.), KOJAKHINA (F.A.) and NIKOLSKY (B.P.). **In Russian.** (Study of the elestrode properties of ionite membranes). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 105-10.

1-04558 — MANTELL (C.L.) and COZZARELLI (F.). **Electrodeposition of cellulose.** *J. Electrochem. Soc.* (1955), 102, No. 3, 110-2.

1-04559 — MAcFARLANE (R.) and FUOSS (R.M.). **Cross linking of polymers by peroxides in dioxane.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2194-5.

1-04560 — MAVRIDES. **Donnés thermodynamiques relatives aux équilibres entre isoagglutinines x et agglutinogènes A.** *J. Chem. Phys.* (1955), 52, No. 1, 1-11.

1-04561 — MAGAT (M.). **La localisation de l'hydrogène dans les cristaux au moyen des méthodes spectrométriques infra-rouges. Hyperfréquence, spectre Raman.** *J. Chem. Phys.* (1955), 52, No. 3, 272-8.

1-04562 — MAJUMDAR (D.K.) and RAKSHIT (P.C.). **The phase-diagram study of the system naphthalene-salol.** *J. Indian, Chem. Soc.* (1955), 32, No. 3, 157-60.

1-04563 — MATHESON (M.S.) and SMALLER (B.). **Paramagnetic species in gamma-irradiated ice.** *J. Chem. Phys.* (1955), 23, No. 3, 521-8.

1-04564 — McCONNELL (H.). **Molecular orbital approximation to electron-spin coupled nuclear spin-spin interactions in molecules.** *J. Chem. Phys.* (1955), 23, No. 4, 760.

1-04565 — McKEAN (D.C.). **The Si-F bond moment.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2660-1.

1-04566 — McCREARY (W.J.). **Partial phase diagram of the system CaI_2-CaF.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2113-4.

1-04567 — McDONALD (C.C.) and GUNNING (H.E.). **Decomposition of ammonia photosensitized by mercury 6 ($^3P_2$) atoms.** *J. Chem. Phys.* (1955), 23, No. 3, 532-41.

1-04568 — McGLYNN (S.P.), PADHYE (M.R.) and KASHA (M.). **Lowest triplet levels of the polyacenes.** *J. Chem. Phys.* (1955), 23, No. 3, 593-4.

1-04560 — MEFFROY-BIGET (A-M). **Sur le classement, suivant le degré de polymérisation, des macromolécules d'un haut polymère par la méthode "en triangle".** *C. R. Acad. Sci., Paris,* (1955), 240, No. 17, 1707-9.

1-04570 — MIGNOLET (J.C.P.). **Relation between the surface potential and the interaction energy in the cases of some hydrogen films.** *J. Chem. Phys.* (1955), 23, No. 4, 753.

1-04571 — MICKEL (B.L.) and ANDREWS (A.C.). **Complexes of histamin with Co11, Ni11 and Cu11.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 323-4.

1-04572 — MIZUDHIMA (S.), ICHISHIMA (I.), NAKAGAWA (I.) and QUAGLIANO (J.V.). **Infrared studies of inorganic coordination compounds. II. Infrared and raman spectra of 1'2 dithocyanatoethane in relation to a new type of optical isomerism of coordination compounds.** *J. Phys. Chem.* (1955),59, No. 4, 293-6.

1-04573 — MINASSIAN-SARAGA (L.T.). **Etude de l'adsorption et de la désorption aux surfaces liquides. II. Adsorption des solutions d'acide laurique. Vérification de l'équation de Gibbs.** *J. Chem. Phys.* (1955), 52, No. 2, 99-101.

1-04574 — MINASSIAN-SARAGA (L.T.). **Contribution à l'étude de l'adsorption et de la désorption aux surfaces liquides.** *.J. Chem. Phys.* (1955), 52, No. 1, 80-94.

1-04575 — MINASSIAN-SARAGA (L.T.). **Etude de l'absorption et de la désorption aux surfaces liquides. III. Désorption des couches monomoléculaires.** *J. Chem. Phys.* (1955), 52, No. 3, 181-200.

1-04576 — MILLER (B.L.). **High-energy secondary electrons.** *J. Chem. Phys.* (1055), 23, No. 3, 599.

1-04577 — MORINO (Y.) and HIROTA (E.). **Mean amplitudes of thermal vibrations in polytomic molecules III. The generalized mean amplitudes.** *J. Chem. Phys.* (1955), 23, No. 4, 737-47.

1-04578 — MOORE (T.E.), GOOTMAN (E.A,) and YATES (P.C.). **Activities of transition metal chlorides in aqueous hydrochloric acid mixtures. I. Nickel (II) chloride and cobalt(II) chloride.** *J. Amer. Chem. Soc.* (1955), 77, No. 298-304.

1-04579 — MOORE (R.L.). **Some kinetic studies of the tin (II) reduction of uranium (VI) in hydrochloric acid media.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1504-6.

1-04580 — MOSER (C.M.). **Sur les coefficients L.C.A.O. du naphtalène obtenus par une approximation semi-empirique de la méthode du champ self-consistent.** *J. Chem. Phys.* (1955), 52, No. 1, 24-33.

1-04581 — MOSER (C.M.) and LEFEBVRE (R.). **Lowest singlet exicited levels of napthalene.** *J. Chem. Phys.* (1955), 23, No. 3, 598.

1-04582 — MULLER (R.L.). **In Russian.** (Nature of the energy of activation and experimental data on the fluidity of refractory glass-forming substanes). *Zh. Prikl. Khim., Leningr.* (1955), 28, No. 4, 363-71.

1-04583 — MURATA (H.) PALM (A.) and MEISTER (A.G.). **Substituted methanes XXV. Potential constants and calculated thermodynamic properties of dibromfluoromethane.** *J. Chem. Phys.* (1955), 23, No. 4, 702-3.

1-04584 — MYERS (V.W.). **Effect of a repulsive force on the scattering of ions by molecules.** *J. Chem. Phys.* (1955), 23, No. 4, 755.

1-04585 — NAKAJIMA (T.). **Atom-stabilization energies in conjugated systems.** *J. Chem. Phys.* (1955), 23, No. 3, 587.

1-04586 — NELSON (F.) and DRAUS (K.A.). **Anion exchange studies. XIII, The alkaline earths in citrate solutions.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 801-4.

1-04587 — NICHOL (J.C.) and FUOSS (R.M.). **Bolaform electrolytes IV. Conductance of a,w-bispyridinium polymethylene bromides and B,B-bisquaternary substituted diethyl ethers in methanol.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 198-202.

1-04588 — NICOLLE (J.) et WEISBUCH (F.). **L'action du chlorure de sodium en solution dans l'eau ordinaire et l'eau lourde sur la vitesse de mutarotation de certains "oses".** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1340-1.

1-04589 — NIKITINE (S.) et ELKOMMOSS (S.G.). **Théorie des perturbations dans l'approximation du modèle métallique. tution.** *J. Chem. Phys.* (1955), 52, No. 2, 108-13.

1-04590 — NOVIKOV (I.I.). **In Russian.** (Two types of phase diagrams for congruently melting chemical substances). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1119-21.

1-04591 — NOYCE (D.S.), PYOR (W.A.) and BOTTIN (A.H.). **Carbonyl reactions. II. Interemediate ketol in the kinetics of the formation of chalocone.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1402-5.

1-04592 — NOYCE (D.S.) and PRYOR (W.A.). **Carbonyl reactions. I. Kinetics of the acid-catalyzed aldol condensation of benzaldehde and acetophenone.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1937-401.

1-04593 — NOYES (R.M.). **Kinetics of competitive processes when reactive fragments are produced in pairs.** *J. Amer. Chem. Soc.* (1955), 77, 8, 2042-5.

1-04594 — ORDWAY (G.L.), CROSS (P.C.) and BAIR (E.J.). **Asymmetric rotor. XII. The infrared spectrum of hydrogen sufide from 7480 to 7880 cm-1.** *J. Chem. Phys.* (1955), 23, No. 3, 541-3.

1-04595 — ONYSZCHUK (M.) and WINKLER (C.A.). **The reaction of active nitrogen with neopenatane.** *J. Phys. Chem.* (1955), 59, No. 368-71.

1-04596 — PARR (R.G.) and PARISER (R.). **On the electronic structure and elctronic spectra of ethylene-like molecules.** *J. Chem. Phys.* (1955), 23, No. 4, 711-25.

1-04597 — PALM (A.), VOLEZ (F.L.) and MEISTER (A.G.). **Substituted methanes XXII. Infrared spectra of $CHBrF_2$, and potential constants and calculated thermodynamic properties of $CHBrF_2$ and $CDBrF_2$.** *J. Chem. Phys.* (1955), 23, No. 4, 726-8.

1-04598 — PATTERSON (C.S.), TYREE (S.Y.) and KNOX (K.). **Activity ceofficient of gallium perchlorate in water at 25 .** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2195-7.

1-04599 — PATTON (R.H.) and SIMONS (J.H.). **Preparation of fluorocarbon carboxylic acid "thiocyanates..** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2017.

1-04600 — PAVLUCHENKI (M.M.). **In Russian.** (Kinetics and mechanism of heterogeneous chemical reactions occuring with the participation of solid bodies). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 39-47.

1-04601 — PATTON (R.H.) and SIMONS (J.H.). **Preparation of fluorocarbon carboxylic acid cyanide dimers.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2016-7.

1-04602 — PANNETIER (G.), GUENEBAUT (H.) et GAYDON (A-G.). **Le système 311-3 du radical ND observé en émission dans la décomposition de l'acide azothydrique lourd N3 D.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 958-60.

1-04603 — PATTI (F.). **Action des rayons X sur des solutions d'uranine S.** *J. Chem. Phys.* (1955), 52, No. 1, 38-40.

1-04604 — PATTI (F.). **Action radiochimique des R.X. sur des solutions diluées d'éosinate de sodium.** *J. Chem. Phys.* (1955), 52, No. 1, 77-9.

1-04605 — PATRA (G.) and PANI (S.). **The study of lactate complex of trivalent antimony by glass electrode.** *J. Indian Chem. Soc.* (1955), 32, No. 3, 161-4.

1-04606 — PETERLIN (A.). **Intrinsic viscosity of polymethylmethacrylate.** *J. Chem. Phys.* (1955), 23, No. 4, 750-1.

1-04607 — PENDRED (D.) and RICHARDS (R.E.). **Nuclear resonance spectra of rubidium and ammonium fluoroborates.** *Trans. Faraday. Soc.* (1955), 51, No. 5, 468-74.

1-04608 — PECSOK (R.L.) and JUVET (R.S.). **The gluconate complexes. I. Copper gluconate complexes in stronly basic media.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 202-6.

1-04609 — PEASON (R.G.), BOSTON (CH.R.) and BASOLO (F.). **Mechanism of substitution reactions in cimplex ions. V. Effects of chelation of the rates of acid hydrolysis of some cobalt (III) complex ions.** *J. Phys. Chem.* (1955), 59. No. 4, 304-8.

1-04610 — PENNA-FRANCA (E.) and DODSON (R.W.). **The effect of cyanide on the rate of he thallous-thallic exchange reaction.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2651-3.

1-04611 — PENELOUX (A.). **Vitesse de réaction et mécanisme au voisinage de l'équilibre.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 758-60.

1-04612 — PECSOK (R.L.) and SANDERA (J.). **The gluconate complexes. II. The ferric-gluconate system.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1489-94.

1-04613 — PERSOZ (B.) et BONNET (J.). **Biréfringence mécanique d'un polyster.** *J. Chem. Phys.* (1955), 52, No. 2, 157-61.

1-04614 — PENELOUX (A.). **La conductance chimique de la réaction 2 IH=I2+H2.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 1531-3.

1-04615 — PFEFFERLE (W.C.), GOFF (J.) and MILLER (J. G.). **Compressibility of gases. I. The Burnett method. An improved method of treatment of the data. Extenion of the method to gas mixtures.** *J. Chem. Phys.* (1955), 23, No. 3, 509-13.

1-04616 — PHILLIPS (J.N.). **The energetics of micelle formation.** *Trans. Faraday Soc.* (1955), 51, No. 5, 561-8.

1-04617 — PHIBBS (M.K.). **The properties of nitrile binary systems and their relation to polyacrylonitrile solubility** *J.. Phys. Chem.* (1955), 59, No. 4, 346-53.

1-04618 — PHILLIPS (J.N.) and MYSELS (K.J.). **Light scattering by aqueous solutions of sodium lauryl sulfate.** *J. Phys. Chem.* (1955), 59, No. 4, 325-30.

1-04619 — PIERCE (L.) and PACE (E.L.). **Thermodynamic properties of nitrogen trifluoride from 12oK to its boiling point. The entropy from molecular and spectroscopic data.** *J. Chem. Phys.* (1955), 23, No. 3, 551-6.

1-04620 — PYLER (E.K.) and ACQUISL (N.). **Small grating spectrometer for the far infrared region.** *J. Chem. Phys.* (1955), 23, No. 4, 752-3.

1-04621 — PLACHENOV (T.G.). **In Russian.** (Elaboration of of the construction of porometers for the study of the structure of porous substances by the method of filling these substances with mercury under pressure). *Zh. Prikl. Khm., Leningr.* (1955), (1955), 28, No. 3, 245-53.

1-04622 — POTTER (A.E.), BENDER (P.) and RITTER (H.L.). **The vapor phase association of acetic-d3 acid-d.** *J. Phys. Chem.* (1955), 59, No. 3, 250-4.

1-04623 — PORTER (J.T.), and COOKE (W.D.). **Electrolytic decomposition of dilute amalgams.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1481-6.

1-04624 — PRITCHARD (H.O.) and SUMNER (F.H.). **The calculation of bond lengths in naphthalene and anthracene.** *Trans. Faraday. Soc.* (1955), 51, No. 5, 457-62.

1-04625 — PRITCHARD (H.O.), PYKE (J.B.) and TROTMAN-DICKENSON (A.F.). **The study of chlorine atom reactions in in the gas phase.** *J. Ammer. Chem. Soc.* (1955), 77, No. 9, 2629-33.

1-04626 — PROBST (H.B.) and SINNOTT (M.J.). **Isothermal austenite grain growth.** *J. Metals.* (1955), 7, No. 1, 215-6.

1-04627 — PTITZIN (B.V.) and VINOGRADOVA (L.I.). **In Russian.** (The determination of the constants of instability of individual complexes by the method of displaced equilibrium). *J. Gen. Chem. Moscow,* (1955), 25, (87), No. 2, 217-23.

1-04628 — PURANIK (P.G.). **Study of chelation through Raman effect.** *J. Chem. Phys.* (1955), 23, No. 4, 761-2.

1-04629 — PULLMAN (B.) et BERTHIER (G.). **Le pouvoir de conjugaison des carbones aromatiques et l'effet bathochrome des méthyles.** *J. Chem. Phys.* (1955), 52, No. 2, 114-8.

1-04630 — RAMACHANDRAN (G.N.). **Infrared spectrum and structure of collagen.** *J. Chem. Phys.* (1955), 23, No. 3, 600-1.

1-04631 — ROUL (Y.), LE BOULCH (N.), BARON (CH.) et GUERILLOT-VINET (A.). **Purification de la substance antirachitique obtenue à partir du cholestérol sans irradiation.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1250-2.

1-04632 — RAYLISS (N.S.), COLE (A.R.H.) and LITTLE (L. H.). **Solvent effects in ifra-p red spectra C=O,C-H, and C-C vibrations.** *Aust. J. Chem.* (1955), 8, No. 1, 26-38.

1-04633 — RAYNAUD (H.) et POURADIER (M.J.). **Etude de la précipitation des mélanges d'iodure et de bromure d'argent. Premier mémoire.** *J. Chem. Phys.* (1955), 52, No. 2, 133-40.

1-04534 — REISMAN (A.) and HOLTZBERG (F.). **Phase equilibria in the system K_2CO_3-Nb_2O_5 by the method of differential. thermal analysis.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2115-9.

1-04635 — REGAK (N.Ya) and SMIRNOV (N.I.). **In Russian.** (Investigation of the processes of adsorption). *Zh. Prikl. Khim., Leningr.* (1955), 28, No. 3, 262-7.

1-04636 — REED (J.F.) and RABINOVITCH (B.S.). **The sodium diffusion flame method for fast reactions. I. Theory of the experimental method.** *J. Phys. Chem.* (1955), 59, No. 3, 261-6.

1-04637 — REY-DHAUSSEY (M.). **Etude des propriétés diélectriques de quelques substances biologiques.** *J. Chem. Phys.* (1955), 62, No. 150-6.

1-04638 — RICHMOND (H.H.) and FREISER (H.). **Electric moments of mono-and diacetylferrocene.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2022-3.

1-04639 — RIES (H.E.), ROBERTS (E.N.) and FIELDS (E.K.). **Monomolecular films of 1,3,4,thiadizole-2,5-bis-a-mercaptostearic and-mercaptolauric acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2574-7.

1-04640 — RICCI (J.E.) and LOPREST (F.J.). **Phase relations in the system sodium oxide-uranium trioxide-water at 50° and 7° . J.** *Amer. Chem. Soc.* (1955), 77, No. 8, 2119-29.

1-04641 — RICE (F.O.) and VARNERIN (R.E.). **Activation energies of reactions of methyl radicals with organic molecules.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 221-4.

1-04642 — RILEY (J.F.) and LYONS (P.A.). **Intensity measurements applied to Gouy diffusiometry.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 261-4.

1-04643 — ROBERTS (D.E.) and MANDELKERN (L.). **Thermodynamics of crystallization in high polymers natural rubber.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 781-6.

1-04644 — ROGINSKY (S.Z.). **In Russian.** (Kinetics of isotopic exchange. Isotopic exchange under dynamic conditions). *C. R. Sci. U.R.S.S.* (1955), 100, No. 5, 939-42.

1-04645 — ROSENBERG (R.M.) and KLOTZ (I.M.). **The binding of organic ions by proteins. Volumechanges.***J. Amer. Chem. Soc.* (1955), 77, No. 8, 2590-4.

1-04646 — ROSTOKER (W.). **Selected isothermal sections in the titanium-rich corners of the systems Ti-Fe-O, Ti-Cr-O, and and Ti-Ni-O.** *J. Metals.* (1955), 7, No. 1, 113-6.

1-04647 — ROZLOVSKY (A.). **In Russian.** (Kinetics of the reaction of chlorine-hydrogen mixture in the absence of ligh. II. Breaking of the chains by the addition of oxygen). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 3-4.

1-04648 — ROWLINSON (H.C.), BURWELL (R.L.) and TUXWORTH (R.H.). **The interaction of deuterium and saturated hydrocarbons on nickel catalysts.** *J. Phys. Chem.* (1955), 59, No. No. 3, 225-31.

1-04649 — RUETSCHI (P.) and DELAHAY (P.). **Influence of of electrode material on oxygen overvoltage:a theoretical analysis.** *J. Chem. Phys.* (1955), 23, No. 3, 556-60.

1-04650 — RUESTSCHI (P.) and DELAHAY (P.). **Potential at Zero charge for reversible and ideal polarized electrodes.** *J. Chem. Phys.* (1955), 23, No. 4, 697-9.

1-04651 — RULFS (C.L.) and STONER (G.A.). **The polarographic reduction of ferric ion in fluoride media.** *J. Amer. Chem. Soc.* (1955), 77, No. 2653-4.

1-04652 — SATTERFIELD (C.N.) and REID (R.C.). **Note on the kinetics of the reactions of the propyl radical with oxygen** *J. Phys. Chem.* (1955), 59, No. 3, 284-5.

1-04653 — SABATIER (G.). **Cinétique de la déshydratation de quelques silicates.** *J. Chem. Phys.* (1955), 52, No. 1, 60-4.

1-04654 — SATO (S.). **On a new method of drawing the potential energy surface.** *J. Chem. Phys.* (1955), 23, No. 3, 592-3.

1-04655 — SAMUEL (I.). **Sur une méthode de calcul des indices de liaison.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 21, 2075-6.

1-04656 — SCOTT (J.J.). **The acid-base equilibria of porphyrins. Nonsimultaneous dissociation of two protons upheld.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 325-6.

1-04657 — SCOTT (D.W.). GOOD (W.D.) and WADDINGTON (G.). **Heat of formation of tetrafluormethane from combustion colarimetry of polytetrafluoroethylene.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 245-6.

1-04658 — SCHLAIN (D.), KENAHAN (C.B.) and STEELE (D.V.). **Galvanic corrosion behaviour of titanium and zirconium in sulfuric acid solutions.** *J. Electrochem. Soc.* (1955), 102, No. No. 3, 102-9.

1-04659 — SCHAERE (A.A.), BUSSO (C.J.), SMITH (A.E.) and SKINNER (L.B.). **Properties of pure normal alkanes in the C_{17} to C_{36} range.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2017-9.

1-04660 — SCHGOLEV (P.VI.) and AKIMOV (G.V.). **In Russian.** (The electrochemical constitution of the surface of aluminium polished by electrolytic methods). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 499-502.

1-04661 — SCHULER (R.) and ALLEN (A.O.). **Radiation-chemical studies with cyclotron beams.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 507.

1-04662 — SCHERR (CH.W.). **SCF ICAO MO study of N2.** *J. Chem. Phys.* (1955), 23, No. 3, 569-78.

1-04663 — SEARS (P.G.), WILHOIT (E.D.) and DAWSON (L.R.). **Conductances of some quaternary ammonium bromides iodides in dimethylformamide at 25°.** *J. Phys. Chem.* (1955), 59, No. 4, 373-5.

1-04664 — SEARS (G.W.). **Viscosity anomaly of supercooled liquids.** *J. Chem. Phys.* (1955), 23, No. 604-5.

1-04665 — SEGALL (H.) and ASTON (J.G.). **Study of nuclear resonance of the supercooled rotational transition of 2,3-dimethylbutane.** *J. Chem. Phys.* (1955), 23, No. 3, 528-31.

1-04666 — SEMENTCHENKO (V.K.) and SKRIPOV (V.P.). **In Russian.** (Phase transitions of the second kind and critical effects. VI. Action of small amounts of added substances on the heat capacity of th system triethylamine-water in the critical region of separation). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 194-7.

1-04667 — SEARS (P.G.), HOLMES (R.R.) and DAWSON (R.). **Conductances, viscosities, and densities of solutions of potassium thiocyanate in methanol at temperatures within the range 25 to - 50° C.** *J. Electrochem. Soc.* (1955), 102, No. 3, 145-9.

1-04668 — SERIKIV (A.S.). **In Russian.** (Structure of silica-gel). *J. Tech. Phys., Moscow,* (1955), 25, No. 1, 112-6.

1-04669 — SEEHOF (J.M.) and BENSON (S.W.). **Further studies of the interactions of polar gases with solid proteins and some simple organic compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2579-85.

1-05670 — SHIMANOUCHI (T.) and MIZUSHIMA (S.I.). **On the helical configuration of a polymer chain.** *J. Chem. Phys.* (1955), 23, No. 4, 707-11.

1-04671 — SHOMATE (C.H.) and COHEN (A.J.). **High temperture heat content and entropy of lithium oxide and lithium hydroxide.** *J. Amer. Chem. Soc.* (1955), 77, No. 2. 285-6.

1-04672 — SHULTZ (J.F.), HALL (W.K.), SELIGMAN (B.) and ANDERSON (R.B.). **Studies of the fischer-tropsch synthesis. XIV. Hagg iron carbide as catalysts.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 213-21.

1-04673 — SHEPPARD (N.) and SIMPSON (D.M.). **Correlations between characteristic frequencies of the paraffins and the skeletal frequancies of some structurally analogous polar molecules.** *J. Chem Phys.* (1955), 23, No. 3, 582-4.

1-04674 — SHERMAN (R.H.) and GIAUQUE (W.F.). **Arsine. Vapor pressure, heat capacity, heats of transition, fusion and vaporization. The entropy from calorimetric and from molecular data.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2154-60.

1-04675 — SHEATS (G.) and NOYES (W.A.). **Photochemical studies. II.-The photochemistry of biacetyl at 3650 and 4350 .** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1421-6.

1-04676 — SHUKLA (R.P.) and BHATNAGAR (R.P.). **Kinetics of cationexchange reaction in solvents other than water. I. Exchange of copper ion by amberlites IRC-50 and IR-120.** *J. Indian, Chem. Soc,* (1955), 31, No. 1, 39-42.

1-04677 — SHARMAN (L.J.) and McCALLUM (K.J.). **Effect of pile irradiation on sodium chlorate.** *J. Chem. Phys.* (1955), 23, No. 3, 597.

1-04678 — SIMONS (J.H.) and WILSON (W.H.). **Surfacetension. and visctosity of liquids.** *J. Chem. Phys.* (1955), 23, No. 4, 613-7

1-04679 — SINGER (J.) and SPENCER (C.W.). **X-Ray crystallographic data on As_2Te_2.** *J. Metals.* (1955), 7, No. 1, 144.

1-04680 — SIMPSON (R.B.), EVANS (R.L.) and SAROFF (H. A). **Polarography of the noble metal.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1438-40.

1-04681 — SMIAOWSKI (M.) and JARMOLOWICZ (H.). **The influence of catalytic poinsons and of substances increasing hydrogen overvoltage on the electrolytic reduction yield of nitrobenzene and oxalic acid.** *Bull. Acad. Polanaise. Sci.* (1955), 3, No. 2, 107-10.

1-04682 — SMITH (D.), DWORKIN (A.S.) and ARTSDALEN (E.R.). **The heats of combustion and formation of boron carbide.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2654-6.

1-04683 — SONE (K.), KRUMHOLZ (P.) and STAMMREICH (H.). **Studies on the coordinate bond. III. Absorption spectra of mono-a,â-dipyridyl and mono-o-phenanthroline compleses.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 777-80.

1-04684 — PONER (H.) and COOPER (C.D.). **Vapor absorption spectra of light and heaby naphthalenes at 2900-2500 A.** *J. Chem. Phys.* (1955), 23, No. 4, 646-51.

1-04685 — SPENCER (D.) and HENSHALL (T.). **Kinetics and mechanism of the reaction of formaldehyde with dimedone I.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1943-8.

1-04686 — SPENCER (H.E.) and ROLLEFSON (G.K.). **The effect of X-rays on solutions which contain formic acid and ceric ion.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1938-34.

1-04687 — SPINNER (I.H.). LU (B.C.Y.) and GRAYDON (W. F.). **Copolymer composition distribution.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2198-200.

1-04688 — STERZER (F.). **Erratum: J=O1,Rotational transition of trifluoriodomethane.** *J. Chem. Phys.* (1955), 23, No. 4, 762.

1-04689 — STEIN (R.S.). **Interaction of methylene deformation frequencies in paraffin crystals II. A theoretical treatment of the interaction of vibrations.** *J. Chem. Phys.* (1955), 23, No. 4, 734-6.

1-04690 — STARANKS (D.R.). **Kinetics of isotopic exchange reactions. The photochemical carbon monoxide + phosgene system.** *Trans. Faraday, Soc.* (1955), 51, No. 514-23.

1-04691 — STURTEVANT (J.M.). **The heat of hydrolysis of p-nitrophenyl phosphate.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 255-8.

1-04692 — STRANKS (D.R.). **Kinetics of isotopic exchange reaction VI. The thermal carbon monoxide+phosgene system.** *Trans. Faraday, Soc.* (1955), 51, No. 5, 524-7.

1-04693 — STRANKS (D.E.). **14C Isotope effects I. The Bicarbonate ion-carbonatocobaltic complex exchange systems.** *Trans. Faraday, Soc.* (1955), 51, No. 5, 492-8.

1-04694 — STRANKS (D.R.). **14C isotope effects. The carbon monoxide phosgene exchange.** *Trans. Faraday, Soc.* (1955), 51, No. 5, 499-504.

1-04695 — STEWART (D.T.) and EMELLUS (K.G.). **Note on an experiment by Rayleigh on active nitrogen.** *Trans. Faraday. Soc.* (1955), 51, No. 5, 491-2.

1-04696 — STIGTER (D.), WILLIAMS (R.J.) and MYSELS *Chem.* (1955), 59, No. 4, 330-5.

1-04697 — STRAUMANIS (M.E.). SHIH (S.T.) and SCHLECHTEN (A.W.). **Hydrogen overvoltage (cathodic potential) on titanium in acidic and basic solutions.** *J. Phys. Chem.* (1955), 59, No. 4, 317-21.

1-04698 — STEINBERGER (R.) and CARDER (K.E.). **Surface temperature of burning liquid nitrate esters.** *J. Phys. Chem.* (1955), 59, No. 3, 255-7.

1-04699 — STRAUMANIS (M.E.) and SCHLECHTEN (A.W.). **Electrochemical behavior of a titanium fused salt-platinum cell.** *J. Electrochem, Soc.* (1955), 102, No. 3, 131-6.

1-04700 — STOCKMAYER (W.H.), RICE (D.W.) and STEPHENSON (C.C.). **Thermodynamic properties of sodium borohydride and aqueous borohydride ion.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1980-3.

1-04701 — STORONKIN (A.V.) and MARKUZIN (N.P.). **In Russian.** (Study of the vapour pressure of saturated and unsaturated solutions of calcium chloride in hydrochloric acid). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 111-9.

1-04702 — STERN (K.H.) and MARTELL (A.E.). **Thermodynamics of ion pair formation in some non-aqueous solvents.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1983-6.

1-04703 — STRELETZ (Kh.L.) and DESYATNIDOV (O.G.). **In Russian.** (The electric conductivity of molten salts of isoconcentration composition (10 by wt. % $MgCl_2$) of the system $MgCl_2$-$CaCl_2$-KCl-NaCl). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 3, 268-74.

1-04704 — STENDER (V.V.). **In Russian.** (The anode problem in electrolysis). *Zh. Prikl. Khim., Loningr,* (1955), 28, No. 2, 212-3.

1-04705 — STEPHENSON (C.C.), BENTZ (D.R.) and STEVENSON (D.A.). **The heat capacity of ammonium nitrate from 15 to 315 K.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2151-5.

1-04706 — STRICKS (W.), KOLTHOFF (I.M.) and KAPPOR (R.C.). **Equilibrium constants of the reaction between sulfite and oxidized glutathione.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2057-61.

1-04707 — STRAUSS (U.P.) and TREITLER (T.L.). **Chain branching in glassy polyphosphates. Dependence on the Na/- ratio and rate of degradation.** *J. Amer.Chem. Soc.*(1955),77, No.6,1473-6.

1-04708 — STURTEVANT (J.M.). **The heat of hydrolysis if poly -l-lysine.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1495-8.

1-04709 — STYRIDOVICH (M.A.), KHAIBULLIN (I.Kh.) and TZKHVIRASHVILI (D.G.). **In Russian.** (Investigation of the solubility of salts in water vapour under high pressure). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1123-6.

1-04710 — SULIVAN (E.A.), JOHNSON (S.) and BANUS (M.D.). **Investigation of hydrogen solubility in molten alkali metal hydroxides.** *J. Cmer. Chem. Soc.* (1955), 77, No. 7,20234.

1-04711 — SWANN (S.), CONSTOTT (E.I.). and BAASTAD (F.H.). **The electrolytic reduction of isobutyraldehyde in acid sikytuib.** *J. Electrochem. Soc.* (1955), 102, No. 3, 113-6.

1-04712 — TAILBUDEEN (O.). **Complex formation between montmorillonoid clays and amino-acids and proteins.** *Trans. Faraday Soc.* (1955), 51, No. 5, 582-90.

1-04713 — TAYLOR (J.E.), SOLDANO (B.) and HALL (G.A.). **A survey of the effects of changes in pH, solvent and salt concentration upon the rate of the periodate-glycol reaction.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2656-7.

1-04714 — TANKA (N.), KOLTHOFF (I.M.) and STRICKS (W.). **Ironcysteinate complexes.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1996-2004.

1-04715 — TANAKA (N.), KOLTHOFF (I.M.) and STRICKS (W.). **Oxidation of ferrous-cysteinate complex by cystine. Oxidation potential of the cystine-cysteine system.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2004-6.

1-04716 — ter HAAR (D.) and NEAVES (A.). **On the thermo-electric power of metals.** *Proc. Roy. Soc.* (A). (1955), 228, No. 1175, 568-74.

1-04717 — THOMPSON (S.O.) and SCHAEFFER (O.A.). **Radiation induced equilibrium of hydrogen-deuterium mixtures.** *J. Chem. Phys.* (1955), 23, No. 4, 759-60.

1-04718 — THOMAS (A.G.). **The departures from the statistical theory of rubber elasticity.** *Trans. Faraday, Soc.* (1955), 51, No. 5, 569-81.

1-04719 — THOMAS (J.R.). **The thermal decomposition of alkyl hydroperoxides.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 246-8.

1-04720 — TIMMERMANS (M.J.) et ROLAND (H.). **Travaux du bureau international d'étalons physico-chimiques. IX. Etude des constantes physiques de vingt composés organiques.** *J. Chem. Phys.* (1955), 52, No. 3, 223-45.

1-04721 — TOMKEIEFF (S.I.). **Atomic sizes and bond types in their relation to the periodic system and to the structure of the atom.** *Sci. Progr.* (1955), 43, No. 169, 29-44.

1-04722 — TOLSTOY (N.A.). **In Russian.** (The hard dipole moment of colloidal particles in water). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 893-6.

1-04723 — TREACY (J.C.) and DANIELS (F.). **Kinetic study of the oxidation of ntric oxide with oxygen in the pressure range 1 to 20 Mm.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2033-6.

1-04724 — TUROMSHINA (U.F.) and STENDER (V.V.). **In Russian.** (Current output and cathode potantials during the electrolysis of zinc sulphate solutions in th presence of ions of metals more electropositive than zinc). *Zh. Prikl. Khim., Leningr.* (1955), 28, No. 4, 372-87.

1-04725 — TYKODI (R.J.). **On first order transitions in adsorption systems.** *J. Phys. Chem.* (1955), 59, No. 4, 383.

1-04726 — TYKODI (R.J.), ASTON (J.G.) and SCHREINER (G.D.L.). **Thermodynamic properties of neon adsorbed on titanium dioxide.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2168-71.

1-04727 — URUSHIBARA (Y.) IMURA (F.) and IKEDA (K.). (K.). **Erratum:polymorphism in solution of cis-and trans-B-methoxy-p nitrochalcone.** *J. Chem. Phys.* (1955), 23, No. 4, 759.

1-04728 — UKSHE (E.A.) and LEVIN (A.I.). **In Russian.** (The simultaneous discharge of copper and hydrogen during the electrolysis of complex solutions). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 943-6.

1-04729 — UKSHE (E.A.) and LEVIN (A.I.). **In Russian.** (Peculairities of the cathode process in a copper pyrophosphate elestrolytic bath). *Zh. Prilk. Khim., Loningr.* (1955), 28, No. 4, 388-93.

1-04730 — VARNERIN (R.E.). **The metathetical reactions of methyl radicals with ethane, dimethyl ether acetone and propylene.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1426-9.

1-04731 — VENKATARAMAN (B.) and FRAENKEL (G.K.). **Paramagnetic resonance of methyl substituted p-benzosemiquinones.** *J. Chem. Phys.* (1955), 23, No. 3, 588-9.

1-04732 — VOLKENSTEIN (M.V.) and PTITZYN (O.B.). **In Russian.** (Internal rotation in polymeric chains and their physical properties. III.). *J. Tech. Phys., Moscow,* (1955), 25, No. 4, 662-70.

1-04733 — VOLKENSTEIN (M.V.) and PTITZYN (O.B.). **In Russian.** (Internal rotation in polymeric chains and their physical properties. II.). *J. Tech. Phys., Moscow,* (1955), 25, No. 4, 649-61.

1-04734 — WAELBROECK (F.G.). **Virial coefficients of benzene-cyclohexane mixtures and theories of liquid solutions.** *J. Chem. Phys.* (1955), 23, No. 4, 749-50.

1-04735 — WAKESHIMA (H.). **Errata:time lag in the self nucleation.** *J. Chem. Phys.* (1955), 32, No. 4, 763.

1-04736 — WALKER (P.L.) and RUSINKO (F.). **Gasification of carbon rods with carbon dioxide.** *J. Phys. Chem.* (1955), 59, No. 3, 241-4.

1-04737 — WALKER (P.L.), RUSINKO (F.) and RAATS (E.). **Changes of macropore distributions in carbon rods upon gasification with carbon dioxide.** *J. Phys. Chem.* (1955), 59, No. 3, 245-9.

1-04738 — WALL (F.T.) and GILL (S.J.). **Transference numbers of electrolytes under pressure.** *J. Phys. Chem.* (1955), 59, No. 3, 278-83.

1-04739 — WANGER (P.) and DUNCAN (A.B.Fi). **The vacuum ultraviolet absorption spectrum of difluoromethane.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2609-10.

1-04740 — WGNER (P.). **Burning velocities of isopropenyl and disopropenyl acetylene.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2650-7.

1-04741 — WAGNER (R.S.), SOLIMENE (N.) and DAILEY (B.P.). **Microwave spectrum of ethyl bromide.** *J. Chem. Phys.* (1955), 23, No. 3, 599.

1-04742 — WAGNER (P.) and DUGGER (G.L.). **Flame propagation. V. Structural influences on burning velocity. Comparison of measured and calculated burning velocity.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 227-31.

1-04743 — WANG (J.H.). **The hydration of desoxyribonucleic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 258-60.

1-04744 — WAZER (J.R.V.), GRIFFITH (E.J.) and McCULLOUGH (J.F.). **Structure and properties of the condensed phosphates. VrI. Hydrolytic degradation of pyro-and tripolyphosphate.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 287-91.

1-04745 — WINGFIELD (E.C.) and STRALEY (J.W.). **Measurement of bond moments in C_2H_2 and C_2D_2 from infrared intensities** *J. Chem. Phys.* (1955), 23, No. 4, 731-3.

1-04746 — WATTS (H.), ALDER (B.J.) and HILDEBRAND (J.H.). **Self-diffusion of carbon tetrachloride, isobars and isochers.** *J. Chem. Phys.* (1955), 23, No. 4, 659-61.

1-04747 — WEBER (A.) and FERIGLE (S.M.). **Normal coordinate treatment of dimethld acetylene.** *J. Chem. Phys.* (1955), 23, No. 3, 597-82.

1-04748 — WEISSMAN (B.), BERNSTEIN (R.B.), ROSSER (S.E.), MEISTER (A.G.) and CLEVELAND (F.F.). **Substituted methanes. XXIII. Infrared spectral data, rotational constants, normal coordinate treatments, and thermodynamic properties for CD_3Br and CH_3Br.** *J. Chem. Phys.* (1955), 23, No. 3, 544-51.

1-04749 — WHITEWAY (S.G.) and MASSON (C.R.). **The carbon monoxide quantum yield in the photolysis of diisopropyl ketone.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1508-9.

1-04750 — WIDOM (B.). **On the structure of the configuration integral in the statistical mechanics of pure fiuids.** *J. Chem. Phys.* (1955), 23, No. 3, 560-8.

1-04751 — WINBREG (I.) and ZIMMERMAN (J.R.). **Concentration dependence of chemical exchange and NMR multiplet structure in wate ethanol mixtures.** *J. Chem. Phys.* (1955), 23, No. 4, 748-9.

1-04752 — WOOD (B.J.) and WISE (H.). **Acid catalysis in the thermal decompositon of ammonium nitrate.** *J. Chem. Phys.* (1955), 23, No. 4, 693-6.

1-04753 — YALMAN (R.G.) and KUWANA (TH.). **Properties of acidocobaltammines. III.** cis-**Nitritotetrammines.** *J. Phys. Chem.* (1955), 59, No. 4, 398-300.

1-04754 — YANKWICH (P.E.) and CORNMAN (W.R.). **Corbon compounds produced by pile neutron irradiation of crystalline ammonium sulfate:target dissolved in water.** *J. Amer. Chem. Soc* (1955), 77, No. 8, 2096-8.

1-04755 — ZETTLEMOYER (A.C.), CHESSICK (J.J.) and CHAND (A.). **Sorption by organic substances. II. Effect of functional groups on ammonia sorption.** *J. Phys. Chem.* (1955), 59, No. 59, No. 4, 375-8.

1-04756 — ZIMMERMAN (G.) and YAUN (C.). **The kinetics of hydrolysis of acetyl chloride in acetone-water mixtures.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 332-3.

1-04757 — ZOBEL (C.R.) and DUNCAN (A.B.F.). **Vacuum ultraviolet absorption spectrum of som halogen derivatives of methane. Correlation of the spectra.** *J. Amer. Chem. Soc.*)1955), 77, No. 9, 2611-5.

1-04758 — ZWOLINSKI (B.J.), MACUS (R.J.) and EYRING (H.). **Inorganic oxidation reduction reactions in solution. Electron transfer.** *Chem. Reves.* (1955), 55, No. I, 157-80.

E 2. ANALYTICAL CHEMISTRY

1-04759 — AARAMAE (A.) und ASSARSSON (G.). **Uber die Trennung von Molybdän und Wolfram durch Sublimation in Chlorwasserstoffatmosphare.** (Separation of molybdenum and tungsten by sublimation in hydrogen chloride atmosphere.) *Z. anal. Chem.* (*Fresenius'*), (1955), 144, No. 6, 412-415.

1-04760 — ALLEN (E.) and SEAMAN (W.). **Method of assay for ethylenimine derivatives.** *Analyt. Chem.* (1955), 27, No. 4,540-3.

1-04761 — ALT (L.L.). **Spectrophotometric determination of gluconic acid and its salts.** *Analyt. Chem.* (1955), 27, No. 5, 749-50.

1-04762 — AMIEL (J.), DUPUY (P.) et NORTZ (M.). **Contribution à l'étude d'une méthode d'extraction des composés polyphénoliques de certaines amélidées.** *C. R. Acid. Sci., Paris,* (1955). 240, No. 7, 780-82.

1-04763 — ARCHIBALD (R.M.). **Clinical chemistry.** *Analyt. Chem.* (1955), 27, No. 4, 677-80.

1-04764 — AULENBACH (D.B.) and BALMAT (J.L.). **Polarographic determination of aliphatic sulfides.** *Analyt. Chem.* (1955), 27, No. 4, 562-4.

1-4765 — BANKS (C.V.) and DAVIS (R.J.). **Analytical applications of the reaction of thorium with benzenephosphomic acid.** *Analyte. chm. acta.* (1955), 12, No. 5, 418-31.

1-04766 — BARAKAT (M.Z.), EL-WAHAB (M.F.A.) and EL-SADR (M.M.). **Action of N-bromosuccinimide on ascorbic acid.** *Analyt. Chem.* (1955), 17, No. 4, 536-40.

1-04767 — BASS (A.S.) and STERNBERS (H.M.) **Specific-surface determination of nitroguanidine by microscopic and air-permeability methods.** *Analyte. Chem.* (1955), 27, No. 5, 808-13.

1-04768 — BEEGHLY (H.E.), CORP (J.S.) and CROP (L.S.). **Ferrous metallurgy.** *Analyt. Chem.* (1955), 27, No. 4, 614-22.

1-04769 — BEKKEDAHL (N.) and TRYON (M.). **Natural and synthetic rubbers.** *Analyt. Chem.* (1955), 27, No. 4, 589-99.

1-04770 — BOBTELSKY (M.) and JUNGREIS (E.). **A microheterometric determination of traces of iron (III) in alloys and salts with α-nitroso-β-naphthol.** *Analyt. chim. acta.* (1955), 12, No. 4, 351-7.

1-04771 — BOBTELSKY (M.) and JUNGREIS (E.). **The heterometric microanalysis of cobalt with nitroso-β-naphthol in the presence of foreign metal.** *Analyt. chim. acta.* (1955), 12, No. 3, 263-70.

1-04772 — BODE (H.) **Untersuchungen uber die Anwendbarkeit der Diathyldithiocarbaminate in der Analyse. III Die photometrische Bestimmung des Tellurs und seine Abtrennung von grossen Mengen Selen.** (Investigations on the applicability of di ethyl-di thio carbaminates for analysis. III Photometric determination of tellurium and its separation from big quantities of selenium.) *Z. anal. Chem.* (*Fresenius'*), (1955), 144, No. 2,90-100.

1-04773 — BODE (H.). **Systematische Untersuchungen über die Anwendbarkeit der Diäthyldithiocarbaminate in der Analyse. IV. Die Bildung der Metall-Biathyldithiocarbaminate und ihre Extrahierbarkeit in Abhangigkeit vom pH Wert der. Losung.** (Systematic research on the applicability of diethyldicthiocarbominates and Anir ex-tractability as a function of the pH value of the solution.) *Z. anal. Chem.* (*Fresenius'*), (1955), 144, No. 3, 165-186.

1-04774 — BOGCYAVLENSKY (P.S.) **In Russian** (The use of physico-chemical analysis in pharmacology). *Zh. prikl. Khim, Leningr.* (1955), 28, No. 1 104-6.

1-04775 — BONAUGURI (E.) und SENIGA (G.) **Uber den Mechanismus der Karl-Fischer-Titration und eine neue Modification dieser Methode.** (On the mechanism of the Karl-Fischer titration an a new modification of this method.) *Z. anal. Chem.* (*Fresenius'*), (1955), 144, No. 3, 161-164.

1-04776 — BOUTILLON (G.) et PRETTRE (M.). **Texture et propriétés adsorbantes des alumines pour chromatographie.** *C. R. Acad. Sci., Paris* (1955), 240, No. 11, 1216-8.

1-04777 — BREMANIS (E.), SCHAIBLE (L.) und BERGNER (K.G.). **Die gravimetrische Bestimmung von Blei mit disubstituierten Dithiocarbaminaten.** (Gravimetric determination of lead with disubstituted dithiocarbamates.) *Z. anal. Chem.* (*Fresenius'*), (1955), 145, No. 1, 18-23.

1-04778 — BRIDGER (G.L.). **Fertilizers.** *Analyt. Chem.* (1955), 27, No. 4, 632-6.

1-04779 — BURR Jr. (W.W.) and MARCIA (J.A.). **Preparation of pressed samples for counting carbon-14-labeled compounds.** *Analyt. Chem.* (1955), 27, No. 4, 571.

1-04780 — CARLETON (L.T.) **Determination of impurity with melting temperature apparatus of Smith.** *Analyt. Chem.* (1955), 27, No. 5, 845-8.

1-04781 — CASTIGLIONI (A.) und VIETTI (M.). **Uber die papierchromatographische Analyse der Mischungen von Caffein, Aspirin und Phenacetin.** (Paper chromatographic analysis of caffeine, aspirine and phenacetin). *Z. anal. Chem.* (*Fresenius'*), (1955), 144, No. 2, 112-113.

1-04782 — CERIOTTI (G.). **A simple paper chromatorgaphic technique for the study of free metabolites of tissues and body fluids.** *Nature, London* (1955), 175, No. 4464, 897.

1-04783 — CHILTON (J.M.) and HORTON (A.D.). **Improved acidimetric determination of fluoride.** *Analyt. Chem.* (1955), 27, No. 5, 842-5.

1-04784 — CHENG (K.L.) and BRAY (R.H.). **1-(2-Pyridylazo)-2-naphthol as possible analytical reagent.** *Analyte. Chem.* (1955), 27, No. 5, 782-85.

1-04785 — CHILDERS (E.) and STRUTHERS (G.W.). **Infrared evaluation of sodium salts of organic acids.** *Analyt. Chem.* (1955), 27, No. 5, 737-40.

1-04786 — CIMERMAN (CH.) and BOGIN (D.). **Microgravimetric determination of lead with mercaptobenzthiazole.** *Analyt. Chm. Acta.* (1955), 12, oN. 3, 218-26.

1-04787 — CLAYTON (G.D.) and GIEVER (P.M.). **Instrumental measurements of visibility in air pollution studies.** *Analyt. Chem.* (1955), 27, No. 5, 708-13.

1-04788 — COGBILL (E.C.) and YOE (J.H.). **Derivatives of anthrarufin, chrysazin and quinizarin as colorimetric reagents for boron.** *Analyt. chim. Acta.* (1955), 12, No. 5,455-63.

1-04789 — CORIOU (H.), DIRIAN (J.) et HURE (J.). **Séparation de traces de manganèse par électrolyse sur cathode de mercure renouvelée.** *Analyt. chim. Acta.* (1955), 12, No. 4, 368-81.

1-04790 — COLLINS (F.D.) and WHEELDON (L.W.). **Chromatography of phospholipids.** *Nature, London* (1955), 157, No. 4461, 772-3.

1-04791 — CORVAL (M.) et LECOMTE (J.). **Le spectre d'absorption infrarouge de l'acetate de méthyle perdeutère.** *Mikrochim. Acta.* (1955), No. 1, 25-8.

1-04792 — COUZOU (P.) et CLERC (A.M.). **Action du bromure de cyanogène sur le noyau pyridinique. Etude spectrophotométrique.** *Analyt. chim. Acta.* (1955), 12, No. 3, 239-47.

1-04793 — CROUTHAMEL (C.E.), JELTE (B.E.) and JOHNSON (C.E.). **Thiocyanate spectrophotometric analysis of titanium vanadium and niobium.** *Analyt. Chem.* (1955), 27, No. 4, 507-14.

1-04794 — DARBY (H.T.) **Solid and gaseous fuels.** *Analyt. Chem.* (1955), 27, No. 4, 660-72.

1-04795 — DATTA (S.K.) and BANERJEE (G.). **Estimation of thorium by organic reagents. VI. Use of some iodobenzoic acids.** *J. Indian chem. Soc.* (1955), 32, No. 3, 167-72.

1-04796 — DATTA (S.K.).) and BANERJEE (G.). **Estimation of thorium by organic reagents: recovery from worn-out gas mantles and tungsten filaments by 2:4-dichlorophenoxyacetic acid.** *Analyt. chim. acta.* (1955), 12, No. 4, 323-8.

1-04797 — DEAL (S.B.). **Spectrographic determination of lead in oxygen-free, high-conductivity copper.** *Analyt. Chem.* (1955), 27, No. 5, 753-4.

1-04798 — DENAMUR (J.). **Dosage des chlorures dans l'eau de mer par une méthode de potentiométrie simplifiée.** *C. R. Acad. Sci., Paris* (1955), 240, No. 11, 1223-5.

1-04799 — DETTY (W.E.), HESTON (B.O.) and WENDER (S.H.). **Amperometric titrations of some flavonoid compounds cupric sulfate.** *J. Amer. chem. Soc.* (1955), 11, No. 1, 162-5.

1-04800 — DESHMUKH (G.S.). **The oxidation of thallium (I) by selenious acid.** *Analyt. chim. Acta.* (1955), 12, No. 4, 319-22.

1-04801 — DE SOUSA (A.). **Le dosage indirect du molybdène par voie complexométrique.** *Analyt. chim. Acta.*(1955), 12, No. 3, 215-7.

1-04802 — DEWEY (B.T.) and PLEIN (E.M.). **Indetification of organic bases by means of optical properties of diliturates (nitrobarbiturates).** *Analyt. Chem.* (1955), 27, No. 5, 862-4.

1-04803 — DIEHL (H.) and BUTLER (J.P.). **Ferricyanide titration of cobalt using ethylenediamine.** *Analyt. Chem.* (1955), 27, No. 5, 777-8.

1-04804 — DRESIA (H.). **Untersuchungen zur Kaliumbestimmung in Lösungen mit dem Geiger-Muller-Zahlrohr.** (Researches on determination potassium in solutions with the Geiger-Muller counter). *Z. Anal. Chem. Fresenius'*), (1955), 144, No. 2, 81-90.

1-04805 — DRUSHEL (H.V.) and MILLER (J.F.). **Spectrophometric determination of aliphatic sulfides in crude petroleum oils and their chromatographic fractions.** *Analyt. Chem.* (1955), 27, No. 4, 495-500.

1-04806 — DUPUIS (TH.). **Nouvelle méthode de dosage gravimétrique du tungstène. Spectres d'absortption infrarouge des tungstates précipités à différents pH.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 978-90.

1-04807 — DUVAL (C.). **Applications des spectres d'absorption infrarouges réalisés sur une goutte de solution aqueuse.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1646-8.

1-04808 — FIGL (F.) and VOKAE (L.). **Präfung auf reduzierende organische Verbindungen mit o-Dinitrobenzol in der Tupfelanalyse.** (Spot test analysis of organic materials with o-dinitrabenzene). *Mikrochim Acta.* (1955), No. 1, 101-4.

1-04809 — FERNANDO (Q.). **Detection and separation of metal ions on maper impregnated with 4-hydroxybenzthiazole** *Analyt. Chem. Acta.* (1955), 12, No. 5, 432-5.

1-04810 — FISHER (H.), HANSON (R.G.) and NORTON (H.W.). **Quantitave determination of glucose and galactose.** *Analyt. Chem.* (1955), 27, No. 5, 757-60.

1-04811 — FLASCHKA (H.) and FRANSCHITZ (W.). **Uber die Anwendung des Indicator Systems nach Brown und Hayes bei domplexometrischen titrationen.** (On the application of the Brown and Hayes inadicator system in complexometric titrations). *Z. Anal. Chem. Fresenius'*), (1955), 144. No. 6, 421-427.

1-04812 — FLASCHKA (H.) und ABDINE (H.). **Uber die alkalimetrische Schnellbestimmung von Kalium nach Fallung mit Natriumeteraphenyloborat.** (Alkalimetric rapid determination of potassium after precipitation with sodium tetra phenylo borate.) *Z. Anal. Chem.* (*Fresenius'*), (1955), 144, No. 6, -415-420.

1-04813 — FLASCHKA (H.) und ABDINE (H.). **Mikrotitrationen mit Athylendiamintetraessigsaure. XIII.. Eine neue Methode zur Bestimmung von Aluminium** (Microtitration with acetic athylendiamin XIII. A new method to determination of Al). *Mikrochim Acta.* (1955), No. 1, 37-43.

1-04814 — FLASCHKA (H.) **Mikrotitrationen mit Athlendiamintetraessigsaure. XIV. Die Bestimmung einger seltener Erden** (Complexometric titration of several rare earths). *Mikrochim. Acta.* (1955), No. 1, 55-60.

1-04815 — FOUARGE (J.). **Graphie sur bandes de papier.** *Analyt. Chem. Acta.* (1955), 12, No. 3, 231-8.

1-04816 — FOUARGE (J.). **Séparation baryum-strontium par chromatographie sur cellulose. II. Chromatographie sur poudre de cellulose.** *Analyt. Chem. Acta.* (1955), 12, No. 4, 432-50.

1-04817 — FRANKLIN (A.J.) and VOLTZ (S.E.). **Plastic dry box.** *Analyt. Chem.* (1955), 27, No. 5, 865-6.

1-04818 — FREYTAG (H.). **Zur Reaktion von Polyvinylcholrid-polymeren mit Pyridin.** (On the reaction of polyvinyl chloride polymers with pyridine.). *Z. Anal. Chem.* (*Fresenius'*), (1955), 145, No. 1, 24-26.

1-04819 — GABOUREL (J.D.), BAKER (J.). and KOCH (C.W.). **Simultaneous determination of total carbon and carbon-14 activity.** *Analyt. Chem.* (1955), 27, No. 5, 795-8.

1-04820 — GAGLIARDI (E.) und THEIS (M.). **Qualitativer Nachweis von Magnesium mittels einiger einfacher Monoazofarbstoffe.** (Qualitative determination of magnesuim by means of some simple mono azo dyes. I). *Z. Anal. Chem.* (*Fresenius*;), (1955), 144, No. 2, 113-115.

1-04821 — GAGLIARDI (E.) und THEIS (M.). **Qualitativer Nachweis von Magnesium mittels einiger einfacher Monoazofarbstoffe. II.** (Qualitative determination of magnesium by means of simple mono aro dyes. II). *Z. Anal. Chem.* (*Fresenius'*), (1955), 144, No. 4, 264-272.

1-04822 — GANGULI (N.C.). **A relation between RF values of undimensional and circular paper chromatography.** *Analyt. Chem. Acta.* (1955), 12, No. 4, 335-41.

1-04823 — GERHARD (E.R.) and JOHNSTONE (H.F.). **Microdetermination of sulfuric acid aerosol.** *Analyt. Chem.* (1955), 27, No. 5, 702.4.

1-04824 — GIBSON (N.A.) and WHITE (R.A.). **Titrations with extractive end-points. II. The dichromate titration.** *Analyt. Chem. Acta.* (1955), 12,-No. 5, 413-7.

1-04825 — GIZYCKI (F.) und REPPEL (L.). **Farberaktionen der Substitutionsprodukte des Harnstoffs.** (Colour reactions of the substitution products of urea). *Z. Anal. Chem.* (*Fresenius'*), (1955), 144, No. 2,109-111.

1-04826 — GLOVER (H.G.). **Improved sensitivity of the iodine pentoxide method for the estimation of carbon monoxide.** *Mikrochim, Acta.* (1955), No. 1, 5-10.

1-04827 — GOTTSCHALK (G.). **Eine automatische Trennsaule für die analytische Praxis.** (Separating colum for analytical proctice). *Z. Analy. Chem.* (*Fresenius'*), -(1955), 144, No. 5, 342-347.

1-04828 — GREEN (J.H.) and WALKLEY (A.). **An interface reaction of hexavalent chromium,the polarographic behavior $HCrO_4$ and CrO_4.** *Aust. J. Chem.* (1955), 8, No. 1, 51-61.

1-04829 — GREWE (R.). **Ein neuer Verbrennungsofen für die Elemenrtanalyse.** (A new combustion furnace for elementary analysis). *Z. Analy. Chem. (Fresenius')*, (1955), 144, No. 5, 321-322.

1-04830 — GUENTHER (E.) and LANGENAU (E.E.). **Essential oils and related products.** *Analyt. Chem.* (1955), 27, No. 4, 672-7.

1-04831 — HACKETT (C.E.S). **A rapid method of the determination of copper in mineral oils.** *Analyt. Chem. Acta.* (1955), 12, No. 4, 538-62.

1-04832 — HAMNER (W.F.), HADDEN (N.) and PADGETT (W.M.). **Use of 50-Cm. Heated cas cell ultraviolet spectrophotometry.** *Analyt. Chem.* -(1955), 27, No. 5, 747-8.

1-04833 — HARA)R.) and WEST (P.W.). **High frequency titration involving chelation with ethylene-diaminetetraacetic acid III. Determination of uranyl ion.** *Analyt. Chem. Acta.* (1955), 12, No. 3, 285-91.

1-04834 — HARTMANN (H.) und STROHL (G.). **Sauerstoffbestimmung in Zink, Cadmium und Blei.** (Determination of oxygen in zinc cadmium and lead). *Z. Analy. Chem.* (*Fresenius'*), (1955), 144, No. 5, 332-342.

1-04835 — HATEM (S.). **La réaction du tétroxyde d'osmium et de l'iodure potassium en solution aqueuse.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 977-8.

1-04836 — HAUSDING (D.). **Vielsetig verwendbare analytische Abserptionskolonne.** (Analytical absorption column with great range of applicabality). *Z. Analyl. Chem.* (*Fresenius'*), (1955), 145, No. 1, 1-5.

1-04837 — HEWITT (C.A.). **Automatic cut-off valve for ion exchange columns.** *Analyt. Chem.* (1955), 27, No. 5, 865-

1-04838 — HINCH (R.J.) Jr. **Hexahydro 1,3,5,-trinitroso-s-triazine (1,3,5,-trinitroso-1,3,5,-triazacyclohexane).** *Analyt. Chem.*(1955), 27, No. 4, 569-70.

1-04839 — HOLLER (A.C.). **Stable starch solutions for iodometry.** *Analyt. Chem.* (1955), 27, No. 5, 866.

1-04840 — HOLLINGSHEAD (R.G.W.). **Studies on derivatives of hydroxyquinoline (oxine). The sensitivity and see selectivity of 5-nitroso-oxine and 2-methyl-5-nitroso-oxine towards the group IIIB metals.** *Analyt. Chem. Acta.* (1955), 12, No. 4, 401-7.

1-04841 — HOLLINGSHEAD (R.G.W.). **5-methil-7-nitrose-8-hydroxyquinoline and selectivity towards certain metallic ions.** *Analyt. Chem. Acta.* (1955), 12, No. 3, 204-10.

1-04842 — HUDY (J.A.) and MAIR (R.D.). **Determination of traces of sulfur in organic compounds.** *Analyt. Chem.* (1955), 27, No. 5, 802-4.

1-04843 — ISSA (I.M.) and AWAD (S.A.). **A new stage in the quantitative reduction of permanganate in alkaline solution (Mn_3O_4).-***J. Indian Chem. Soc.* (1955), 31, No. 1, 23-8.

1-04844 — JAMES (J.A.) and RICHARDS (D.H.). **Radioactivation analysis of arsenic in silicon.** *Nature, London,* (1955),-175, No. 4461, 769-70.

1-04845 — JENTZSCH (D.) und FROTSCHER (I.). **Anwendung von Ionenaustauschen in der analytischen Chemie. II. Adsorptionverhalten von Elementen an einem Anionenaustauscher in salzsaurer Losung.** (Use of ion-exchangers in analytical chemistry II. Adsorption behaviour of elements on an anion exchangeer in hydrochloric acid solution). *Z. Analy. Chem.* (*Fresenius'*), (1955), 144, No. 1, 17-25.

1-04846 — JENTZSCH (D.), FROTSCHER (I.), SCHWERDTGER (G.) und SARFERT (G.). **Quantitative Analyse auf Indium.** (Quantitative analysis for indium). *Z. Anal. Chem.* (*Fresenius'*), (1955), 144, No. 1, 8-16.

1-04847 — JENTZSCH (D.) and FROTSCHER (I.). **Anwendung von Ionaustauschern in der analytichen Chemie. I. Trennung von Lithium Natrium-und Kalium-Ionen.** (Use of ion-exchangers in analytical chemistry. I. Separation of lithium, sodium and potassium ions). *Z. Anal. Chem.* (*Fresenius'*), (1955), 144, No. 1, 1-8.

1-04848 — JOGNSON (R.A.) and GRAHAM (C.B.). **A study of the reproducibility of analytical balances.** *Analyt. Chem. Acta.* (1955), 12, No. 408-12.

1-04849 — JOHNSEN (S.G.) and KIRK (J.E.). **Procedure for determination of diffusion coefficients of gases and nongaseous solutes for membranes.** *Analyt. Chem.* (1955), 27, No. 5, 838-40.

1-04850 — JOHN (J.L.ST.). **Pesticides.** *Analyt. Chem.* (1955), 27, No. 4, 645-60.

1-04851 — JURA (W.H.). **Polarographic determination of S-(1-2-dicarbethoxyethyl)-O,O-dimethyl dithiophosphate (malathion).** *Analyt. Chem.* (1955), 27, No. 4, 525-8.

1-04852 — KAMECKI (J.) and TRAU (J.). **Thermal and thermogravimetric analysis of hydrated cupric chloride.** *Bull. Acad. Polonaise. Sci.*, (1955), 3, No. 2, 111-6.

1-04853 — KARNOVSKY (M.L.), FOSTER (J.M.), GIDEZ (L.I.), HAGERMAN (D.D.), ROBINSON (C.V.), SOLOMON (A.K.), and VILLEE (C.A.). **Correction factors for comparing activities of different carbon-14labeled compounds assayed in flow proporttional counter.***Analyt. Chem.* (1955), 27, No. 5, 852-4.

1-04854 — KASSNER (J.L.), PORRATA (A.G. and E.L.). **Spectrophotometric determination of niobium in niobium-bearing steels** *Analyt. Chem.* (1955), 27, No. 4, 492-4.

1-04855 — KATZ (M.). **Symposium on analytical methods and instrumentation in air pollution introduction.** *Analyt. Chem.* (1955), 27, No. 5, 692-4.

1-04856 — KEILY (H.J.) and ROGERS (L.B.). **Nephelometric determination of sulfate impurity on certain reagent-grade salts.** *Analyt. Chem.* (1955), 27, -No. 5, 759-62.

1-04857 — KEYWORTH (D.A.) and STONE (K.G.). **Study of oxidation using copper (III) reagents.** *Analyt. Chem.* (1955), 27, No. 5, 833-5.

1-04858 — KIES (H.L.). **Uber einige Titrationen nach dem''dead-stop'' Verfahren mit Verwendung von Quecksilber-elektroden** (Some titrations with the "dead-stop" methode by application of mercury electrodes). *Anlyt. Chem. Acta.* (1955), 12, No. 3, 280-4.

1-04859 — KIES (H.L.). **Eine mercurimetrische Bestimmungsmethode von Thioharnstoff.** (Mercurimetric method for the determintation of thiourea). *Z. Analyt. Chem.* (*Fresenius'*), (1955), 145, No. 1, 5-9.

1-04860 — KLEMENT (R.). **Trennung des Urans von dreiwertigem Eisen mittels Ionenaustausches.** (Separation of uramim from trivalent iron by means of ion-exchange). *Z. Analyt. Chem.* (*Fresenius'*), (1955), 145, No. 1, 9-12.

1-4861 — KLINGMAN (D.W.), HOOKER (D.T.) and BANKS (C.V.). **Photometric titration assembly for Beckman model DU spectrophotometer.** *Analyt. Chem.* (1955), 27, No. 4, 572.

1-04862 — KONSKI (C.T.) and DOYLE (G.J.). **Light-scattering studies in aerosols with new counter-photometer.** *Analyt. Chem.* (1955), 27, No. 5, 694-702.

1-04863 — KRESS (K.E.) and MESS (F.G.S.). **Indentification of curing agents in rubber products.** *Analyt. Chem.* (1955), 27, No. 4, 528-34.

1-04864 — KURTYKA (Z.). **On the azeotropic range of acetic acid with respect to the homolgous series of parffin hydrocabons.** *Bull. Acad. Polonaise, Soc.*, (1955), 3, No. 1, 47-50.

1-04865 — LACOURT (A.) et HEYNDRYEKX (P.). **Séparation chromatographique sur papier du cobalt, du cuivre et du zinc.** *Microchim, Acta.* (1955), No. 1, 61-87.

1-04866 — LACHIVER (F.). **Etude du microdosage de l'iode par la méthode catalytique.** *Ann. Chem.* (1955), 10, 92-134.

1-04867 — LAMBERT (J.L.), YASUDA (S.K.) and GROTHEER (M.P.). **Colorimetric determination of sulfate ion.** *Analyt. Chem.* (1955), 27, No. 5, 800-2.

1-04868 — LARSON (T.E.) and HENLEY (L.). **Determination of low alkalinity or acidity in water.** *Analyt. Chem.* (1955), 27, No. 5, 851-2.

1-04869 — LAZAREVIC (D.P.). **Mercury cell for cathodic separation of elements.** *Analyt. Chem. Acta.* (1955), 12, No . 4, 363-7.

1-04870 — LEVIN (H.) and BEACON (N.Y.). **Petroleum.** *Analyt. Chem.* (1955), 27, No. 4, 599-610.

1-04871 — LOVE (S.K.) and THATCHER (L.L.). **Water analysis.** *Analyt. Chem.* (1955), 27, No. 680-90.

1-04872 — MACNEVIN (W.M.) and KRIEGE (O.H.). **Chelation of platinum group metals.** *Analyt. Chem.* (1955), 27, No. 4, 535-6.

1-04873 — MAHLMAN (H.A.) and LEDDICOTTE (G.W.). **Determination of microgram and submicrogram quantities of uranium by neutron activation analysis.** *Analyt. Chem.* (1955), 27 No. 5, 823-5.

1-04874 — MAHR (C.) und OTTERBEIN (H.). **Ein Beitrag zur Bleibestimmung.** (Contribution to the estimation of lead) *Z. Analyt. Chem.* (*Fresenius'*), (1955), 144, No. 1, 28-30.

1-04875 — MAJUMDAR (A.K.) and KUMAR (A.). **5:6-Benzoquinaldinic acid as an analytical reagent. V. Separation of cadmium from different elements.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 85-8.

1-04876 — MALMBERG (E.W.). **Effect of particle size on characteristics of silicic acid chromatographic adsorbent.** *Analyt. Chem.* (1955), 27, No. 5, 840-2.

1-04877 — MALMSTADT (H.V.) and ROBERTS (C.B.). **Automatic spectrophotometric titration with coulometrically generated titanous ion.** *Analyt. Chem.* (1955), 27, No. 5, 741-3.

1-04878 — MARSH (M.M.), and HILTY (W.W.). **Pharmaceuticals and natural drugs.** *Analyt. Chem.* (1955), 27, No. 4, 636-54.

1-04879 — MATCHETT (J.R.) and LOESECKE (H.W.). **Food.** *Analyt. Chem.* (1955), 27, No. 4, 623-41.

1-04880 — McKENZIE (R.M.) and PLAM (A.W.). **A mechanical calculator for background correction in spectrographic analysis.** *Aust. J. Appl. Sci.*, (1955), 6, No. 1, 38-40.

1-04881 — McKINLEY (T.D.). **Determination of hydrogen in titanium.** *J. Electrochem. Soc.*, (1955), 102, No. 3, 117-23.

1-04882 — MEYER (A.S.) and LINDBERG (M.C.). **Optical-analytical studies on steroids.** *Analyt. Chem.* (1955), 27, No. 5, 813-7.

1-04883 — MEYER (S.W.), KELLY (F.H.) and MORTON (M.E.). **Ammonia determination and sample preparation for mass spectrometer by micro diffusion method..** *Analyt. Chem.* (1955), 27, No. 5, 837-8.

1-04884 — MIDULA (J.J.) and CODELL (M.). **Polarographic determination of copper, nickel, cobalt, manganese, and chromium in titanium alloys.** *Analyt. Chem.* (1955), 27, No. 5, 729-32.

1-04885 — MISRA (R.N.) and SICAR (S.S.G.). **The use of some thioglycollanilides in inorganic analysis.** *J. Indian, Chem. Soc.*, (1955), 32, No. 2, 127-34.

1-04886 — MONKMAN (J.L.). **Gas chamber microapparatus in identification of air pollutants.** *Analyt. Chem.* (1955). 27, No. 5, 704-8.

1-04887 — MORRISON (G.H.) and COSGROVE (J.F.) **Accivitation analysis of trace impurities in silicon using scintillation spectrometry.** *Analyt. Chem.* (1955), 27, No. 5, -810-2.

1-04888 — MUNTZ (J.H.) and MELSTED (S.W.). **Spectrographic analysis of briquetted unashed plant material.** *Analyt. Chem.* (1955), 27, No. 5, 751-3.

1-04889 — MUSIL (A.) und THEIS (M.). **Die direkte komplexometrische Bestimmung des Zirkoniums.** (Direct complexometric determination of zirconium). *Z. Analyt. Chem.* (*Fresenius'*), (1955), 144, No. 6, 427-430.

1-04890 — MUSIL (A.) und PIETSCH (R.). **Die Fällung von Wismut mit Arsanilsäure.** (Precipitation of bismult with arssanilic acid). *Z. Analyt. Chem.* (*Fresenius'*), (1955), 144, No. 5, 347-350.

1-04891 — MUSIL (A.) und THEIS (M.). **Die komplexometrische Bestimmung des Eisens mit Chromazurol S als Indicator.** (Complexometric determination of iron using chromazurol S as indicator). *Z. Analyt. Chem.* (*Fresenius'*), (1955), 144, No. 5, 351-553.

1-04892 — MULLIN (J.B.) and RILEY (J.P.). **The spectrophotometric determination of nitrate in natural waters, with particular reference to sea-water.** *Analyt. Chem. Acta.* (1955), 12, No. 5, 464-80.

1-04893 — NAHUM (R.). **Méthode expérimantale d'analyse dans l'infrarouge. Résultats de l'étude en série furannique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1898-900.

1-04894 — NETHERTON (L.E.), WREATH (A.R.) and BERNHART (D.N.). **Determination of soluble ortho-pyro and triphosphate in presence of each other.** *Analyt. Chem.* (1955), 27, No. 5, 860-2.

1-04895 — NEILSCH (W.) und BOLTZ (G.). **Versuche sur filterphotometrischen Eisenbestimmung mit Nitrilotriessigsäure.**, (Experiments on filter photometric iron determination with nitrilo-tri-acetic acid). *Z. Anal. Chem.* (*Fresenius'*), (1955), 14, No. 6, 401-406.

1-04896 — NIELSCH (W.). **Zur photometrischen Tellurbestimmung mit Thioharnstoff.** (On the photometrid determination of tellurium with thio urea). *Z. Analyt. Chem.* (*Fresenius'*), (1955). 144, No. 3, 191-192.

1-04897 — OELSCHLAGER (W.). **Die Funktion der Silberlonen bei der Oxydation von Chrom (III) zu Chrom (VI) bzw. Mangan (II) zu mangan (VII) in saurer losung mittels Ammoniumpersulfat** (The function of silver-ions in the oxidation of chronium (III) to chromium (VI), tesp. of manganese (II), to manganese (VIII) in acid solution by means of ammonium persulfate). *Z. Analyt. Chem.* (*Fresenius'*), (1955), 144, No. 1, 27-28.

1-04898 — ONISHI (H.). **Detection of gallium with rhodamine B.** *Analyt. Chem.* (1955), 27, No. 5, 832-3.

1-04899 — ONSTOTT (E.I.). **The separation of europium from samarium by electrolysis.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2129-32.

1-04900 — ORESKES (I.) and SAIFER (A.). **Qualitative determination amino acids in protein hydrolyzates by circular paper chromatography.** *Analyt. Chem.* (1955) 7, No. 5, 85-56.

1-04901 — RAMANA RAO (D.V.). **Isopoly-molybdic acids.** *Analyt. Chem. Acta.* (1955), 12, No. 3, 211-4.

1-04902 — PARSONS (J.)-and BEHER (W.T.). **X-ray diffraction powder data for ster oids.** *Analyt. Chem.* (1955), 27, No. 4, 514-6.

1-04903 — PAPUCCI (R.A.) and KLINGENBERG (J.J.). **Determination of zirconium in magnesium alloys using bromo or chloromandelic acid.** *Analyt. Chem.* (1955), 27, No. 5, 835-7.

1-04904 — PATTERSON (G.D.) and BUFFALO (N.Y.). **Automatic operations.** *Analyt. Chem.* (1955), 27, No. 4, 574-88.

1-04905 — PEPE (J.J.), KNIEL (I.) and CZUHA (H.) Jr. **Ultraviolet determination of combined methyl isopropenyl ketone in polymers.** *Analyt. Chem.* (1955), 27, No. 5, 755-8.

1-04906 — PETROVA (L.N.) and NOVIKOVA (E.N.) **In Russian-** (Polarographic estimation of aldehydes as 2,4-dinitrophenyl. hydrazones). *Zh. Prikl. Khim, Leningr.* (1955), 28, No. 2, 219-21.

1-04907 — PICKERING (W.F.) and JACOBS (E.B.). **The role of the compex formation in partition paper chromatography.** *Analyt. Chem. Acta.* (1955), 12, No. 5, 436-42.

1-04908 — PIETSCH (R.). **Ein Beitrag zur Bestimmung des Arsens in organischen Verbindungen.** (Contribution to the determination of arsenic in organic compounds). *Z. Anal. Chem. (Fresenius')*, (1955), 154), No. 5, 353-356.

1-04909 — POND (R.L.) and PAXTON (R.R.). **Water-containing jars and greased plates for dustfall measurements.** *Analyt. Chem.* (1955), 27, No. 5, -714-5.

1-04910 — PORZER (C.C.). **Color reaction for determination of some armatic nitro compounds.** *Analyt. Chem.* (1955), 27, No. 5, -805-7.

1-04911 — PORTER (P.) and WYLD (G.). **Elimination of interferences in flame photometry.** *Analyt. Chem.* (1955), 27, No. 5, 733-6.

1-04912 — PRESENELL (A.K.). **Rapid preparation of mineral oil mull.** *Analyt. Chem.* (1955), 27, No. 4, 571-2.

1-04913 — RAO FOPALA (G.), RAO NARAYANA(V.), SOMIDEVAMMA (G.) and LALITA (K.). **Cacotheline as a reagent for the detection of ferrous and ferric ion.** *Analyt. Chem. Acta. Acta.* (1955), 2, No. 3, 271-9.

1-04914 — RAPPOPORT (D.A.), CALVERT (C.R.), LOEFFLER (R.K.) and GAST (J.H.). **Chromatographic separation and determination of porphyrin mrthyl esters.** *Analyt. Chem.* (1955), 27, No. -5, 820-3.

1-04915 — REILLEY (C.N.) and CRAWFORD (C.M.). **Principles of precision colorimetry.** *Analyt. Chem.* (1955), 27, No. 5, 716-25.

1-04916 — REILLEY (C.N.), EVERETT (G.W.) and JOHNS (R.). **Experimental evaluation.** *Analyt. Chem.* (1955), 27, No. 483-91.

1-04917 — REDISKE (J.H.), PALMER (R.E.) and CLINE (J.F.). **Assay of iron 55 and iron 59 in biological samples.** *Analyt. Chem.* (1955), 27, No. 5, 849-50.

1-04918 — REAVILLE (E.T.) and SHREVE (G.W.). **Determination of acetovanilone in oxidized alkaline cleaved sulfite liquor by paper chromatography.** *Analyt. Chem.* (1955), 27, No. 4, 565-7.

1-04919 — RINCK (E.) et FESCHOTTE (P.). **Sur le mécanisme de formation des laques colorées obtenues avec l'acide aurinetricarboxylique en présence d'ions trivalents. Etude comparée des ions Fe3+, Al3+et Ga3+.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 15, 1618-20.

1-04920 — ROBERT (L.) FAVRE (J.). **Le spectrométre infrarouge dans l'analyse des huiles et graisses minérales.** *Rev. Inst. Franc. Petrole.* (1955), 10, No. 3, 164-9.

1-04921 — ROUNDS (G.L.) and MATOI (H.J.). **Electrostatic sampler for dust-laden gases.** *Analyt. Chem.* (1955), 27, No. 5, 829-30.

1-04922 — ROYER (G.L.), LAWRENCE (H.C.), KODAMA and WARREN (C.W.), **Manual and continuous recording attachments for beckman model DU spectrophotometer.** *Analyt. Chem.* (1955), 27, No. 4, 501-6.

1-04923 — ROSEN (A.A.) and MIDDLETON (F.M.). **Indetification of petroleum refinery wastes in surface waters.** *Analyt. Chem.* (1955), 27, No. 5, 790-4.

1-04924 — ROSEN (M.J.). **Detection of surface-active agents containing polyxyethylene group.** *Analyt. Chem.* (1955), 27, No. 5, 787-90.

1-04925 — ROWLEY (K.) and SWIFT (E.H.). **Coulometric determination of selenium.** *Analyt. Chem.* (1955), 27, No. 5, 818-20.

1-04926 — SALUTSKY (M.L.) and KIRBY (H.W.). **Preparation and half life of carrier-free yttrium-90.** *Analyt. Chem.* (1955), 27, No. 4, 567-9.

1-04927 — SAMUELSON (O.), SJOSTROM (E.) und FORSBLOM (S.T.). **Uber die Verwendung von Ionenaustauschern in der analytischen Chemie XXVIII. Bestimmung der Alkalimetalle neben Magnesium, Calcium und anderen Metallen.** (On the use of ion ixchangers in analytical chemistry XXVIII. Determination of alkali metals in presence of magnesium, calcium and other metals). *Z. Analyt. Chem. (Fresenius')*, (1955), 144, No. 5, 323-328.

1-04928 — SATO (T.R.), NORRIS (W.P.) and STRAIN (H.H.). **Effect of concentration and sorption upon migration of cations in paper electromatography.** *Analyt. Chem.* (1955), 27, No. 4 521-4.

1-04929 — SCARANO (E.) and CEGLIE (A.). **Mercurymercurous acetate indicator electrode for potentiometric titrations in anhydrous acetic acid.** *Analyt. Chem. Acta.* (1955), 12, No. 3, 292-6.

1-04930 — SCHONIGER (W.). **Die mikroanalytische bestimmung von stickstoff mittels magnesiumaufschlusses. II.** (A micro pocedure for the determination of the nitrogen by means decomposition with magnesium. II.) *Mikrochim, Acta.* (1955), No. 1, 44-8.

1-04931 — SCHLEICHER (A.). **Katalyse und Induktion bei Redox-Titrationen. VI. Katalyse bei Redox-Titrationen.** (Catalysis and induction in redox-titrations. VI. Catalysis in redox-titrations). *Z. Analyt. Chem. (Fresenius')*, (1955), 144, No. 2, 100-105.

1-04932 — SENSARMA (R.N.) and MALLICK (A.K.). **A selective procedure for the gravimetric estimation of uranium as oxinate using complexone as masking agent.** *Analyt. Chem. Acta.* (1955), 12, No. 4, 329-34.

1-04933 — SHAPIRO (L.) and BRANNOCK (W.W.) **Rapid determination of water in silicate rocks.** *Analyt. Chem.* (1955), 27, No. 4, 560-2.

1-04934 — SHAPIRO (L.) and BRANNOCK (W.W.). **Automtic photometric titrations of calcium and magnesium in carbonate rocks.** *Analt. Chem.* (1955), 27, No. 5, 725-29.

1-04935 — SHER (I.H.). **Two-step mixed indicator for Kjeldahl nitrogen titration.** *Analyt. Chem.* (1955), 27, No. 5, 831-2.

1-04936 — SHOEMAKER (C.E.). **Polarographic determination of traces of fluoride and iron.** *Analyt. Chem.* (1955), 27, No. 4, 552-7.

1-04937 — SIGGA (S.) and STAHL (C.R.). **Determination of carboxyl amides by reduction to corresponding amine.** *Analyt. Chem.* (1955), 27, No. 4, 550-2.

1-04938 — SINHA (S.K.). **Potentiometric titrations using resin membrane electrodes.** *J. Indian, Chem. Soc.* (1955), 31, No. 1, 35-8.

1-04939 — SIROTENKO (A.A.). **Modification of Friedrich's Micro-alkimide apparatus.** *Microchim, Acta.* (1955), No. 1, 1-4.

1-04940 — SLJIVIC (S.), BURIC (I.) und NIKOLIC (K.). **Das Chinolin als Fluorescenzindicator.** (Quinoline as fluoresence indicator). *Z. Analyt. Chem, (Fresenius')*, (1955), -145, No. 1, 16-18.

1-04941 — SOLOWAY (S.) and SANTORO (A.). **Detection of unsubstituted para position in phenols.** *Analyt. Chem.* (1955), 27, No. 5, 798-800.

1-04942 — SOMASUNDARAM (K.M.) and SURYANARAYANA (C.V.). **New substitutes for the Zimmermann-Reinhardt reagent.** *J. Indian. Chem. Soc.* (1955), 31, No. 1, 45-8.

1-04943 — SOYE (C.). **Une chromatographie, sur papier, de l'uranium.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1894-6.

1-04944 — SPECKER (H.) und KOHLE (K.). **Eine Methode zur Bestimmung kleiner Mengen Tetrahydrofuran in wassrigem Losungen.** (Method for the determination of small quantities of tetrahydrofurane in aqueous solutions). *Z. Analyt. Chem. (Fresenius')*, (1955), 144, No. 4, 272-274.

1-04945 — SPECKER (H.) und KUCHTNER (M.). **Trennung des Eisens von Cer durch Verteilen zwischen zweiLosungsmitteln.** (Separation of iron from cerium by distribution between tow solvents). *Z. Analyt. Chem.* (*Fresenius'*), (1955), 144, No. 1, 25-27.

1-04946 — SPERIDONOVA (S.I.). **In Russian.** (Physical titration of aqueous solutions of electrolytes in the presence of turbiditv indicators). *J. Phys. Chem., Moscow.* (1955), 29, No. 1, 159-65.

1-04947 — SUSEELA (B.). **Die Bestimmung von Vanadium mit Hilfe von seleniger Säure.** (Determination of vanadium by meens of selenious acid). *Z. Anlyt. Chem. Fresenius'*), (1955), 144, No. 5, 329-31.

1-04948 — STOFFER (K.G.) and PHILLIPS (J.H.). **Determination of carbon in sodium-potassium alloy.** *Analyt. Chem.* (1955), 27. No. 5, 773-6.

1-04949 — STAFFORD (R.W.) and DEICHERT (W.G.). **Coatings.** *Analyt. Chem.* (1955), 27, No. 4, 611-4.

1-04950 — STALCUP (H.) and WILLAIMS (W.). **Volumetric determination of nitrocellulose and nitroguanidine.** *Analyt. Chem.* (1955), 27, No. 4, 543-6.

1-04951 — STROLE (U.). **Verwendung von Carboxylpapier in der Papierchromatographie** (Use of carboxyl paper in paper chromatography). *Z. Analyt. Chem.* (*Fresenius'*), (1955), 144, No. 4, 256-264.

1-04952 — ULTEE (A.J.) Jr., and HARTEL (J.). **Chromatographic determination of carboxyl groups in filter paper.** *Analyt. Chem.* (1955), 27, No. 4, 557-60.

1-04953 — UMBERGER (E.J.). **Isonicotinic acid hydrazide as reagent for determination of** 3-**ketosteriods.** *Analyt. Chem.* (1955), 27, No. 5, 768-72.

1-04954 — USANOVICH (M.I.) and MU6 (A.I.). **In Russian** (Determination of the composition of a mixture of NaCl., Na_2SO_4 and H_2O by the observation of the specific gravity and the index of refaction). *Zh. Prikl. Khim., Leningr.* (1955), 28, No. 4, 436-40.

1-04955 — VAECK (S.V.). **Quantitative inorganic paper chromatography. Direct determination of cobalt by a scanning method.** *Analyt. Chem. Acta.* (1955), 12, No. 5, 443-54.

1-04956 — VANDALEN (E.) and GRAHAM (R.P.). **M-nitrophenylarsonic acid as a polarographic reagent for titanium.** *Analyt. Chem. Acta.* (1955), 12, No. 5, 489-98.

1-04957 — VECERA (M.). **Mikrobestimmung von stickstoff, schwefel, chlor und brom in organischen stoffen.** (Microdetermination of nitrogen, sulfur, chlorine and bromine in organic materials). *Mikrochim, Acta.* (1955), No. 1, 88-100.

1-04958 — VEERESWARARAO (U.), MURALIKRISHNA (U.) und GOPALARAO (G.). **Die Bestimmung von Permanganat neben Dichromat mit Thallium (I)-sulfat.** (Determination of permanganate in presence of dicromale with thallium (I) sulfate). *Z. Anal. Chem.* (*Fresenius'*), (1955), 145, No. 1, 12-16.

1-04959 — VERSCHRAGEN (P.). **Comparative investigation of some methods for the determination of the nitrogen content of nitrocellulose.** *Analyt. Chem. Acta.* (1955), 12, No. 3, 227-30.

1-04960 — TEAGUE (A.F.), GEY (W.A.) and VAN DOLAH (R.W.). **Order of adsorption affiinties of polynitrostilbenes.** *Analyt. Chem.* (1955), 27, No. 5, 785-6.

1-04961 — TEPE (J.B.) and JOHN (C.V.St.). **Determination of erythromycin by ultraviolet spectrophotometry.** *Analyt. Chem.* (1955), 27, No. 5, 744-6.

1-04962 — THALER (H.) und MUHLBERGER (F.H.). **Die Bestimmung des Aluminiums in Lebensmittein und biologischem Materials.** (The determination of aluminium in food stuffs and biologic materials). *Z. Analyt. Chem. Fresenius'*); (1955), 144, No. 4, 241-256.

1-04963 — THEIS (M.). **Die direkte massanalytische Bestimmung des Aluminiums mit Athylendiamintetraessigsäure (Komplexon III.** (Direct volumetric dstermination of alumium with ethylenediamine tetra acetic acid(komplection III). *Z. Analyt. Chem.* (*Fresenius'*), (1955), 144, No. 2, 106-108.

1-04964 — THEIS (M.). **Ein neuer empfindlicher Nachweis des Berylliums.** (A new sensitive method for the determination of Berylhium). *Z. Analyt. Chem. (Fresenius'*), (1955), 144, No. 3, 192-194.

1-04965 — THEIS (M.). **Die komplexomtrische Bestimung des des Kupfers in saurer und ammoniakalischer Losung unter Verwendung von Chromazurol S als Indicator.** (Compiexmetric determination of copper in acid and ammoniacal solutions, using chromazural S as indicator). *Z. Analyt. Chem.* (*Fresenius'*), (1955), 144, No. 4, 275-287.

1-04966 — TUTUNDZIC (P.S.) und MLADENOVIC (S.). **Quantitative elektrolytische erzeugung von Permanganationen.** (Quantitative electrolitic generation of permangante ions). *Analyt. Chem. Acta.* (1955), 12, No. 4, 382-9.

1-04967 — TUTUNDZIC (P.S.), DOROSLOVACKI (I.) und TATIC (O.). **Coulometrische argentometrie. Quantitative Bestimmung von chlor-, brom-und jodionen.** (Coulometric argentometry. Quantitative determination of chloride, bromide and iodine ions). *Analyt. Chem. Acta.* (1955), 12, No. 5, 481-8.

1-04968 — TUTUNDZIC (P.S.) und MLADENOVIC (S.). **Coulometrische permanganatometrische bestimmung von oxalat, ferro und arsenitionen.** (Coulometric permanganometric determinations of oxalate, ferrous and arsenitions). *Analyt. Chem. Acta.* (1955), 12, No. 4, 390-9.

1-04969 — WAEEK (A.V.) und weisler (F.). **Die bestimmung kleinster Mengen von Alkoholen in sehr verdunnten wassrigen Losungen.** (Determination of very small quantities of alchols in diluted water solutions), *Mikrochim, Acta.* (1955), No. 1, %29-36.

1-04970 — WAKINEN (E.) and RINGBOM (A.). **Complexometric titration of aluminium.** *Analyt. Chem. Acta.* (1955), 12, 12, No. 4, 308-18.

1-04971 — WATT (G.W.) and McBRIDE (W.R.). **The ammonolysis of the sulfates of hydrazine, methylhydrazine, Hydroxylamine and semicarbazide, and the ammonation of these bases and certain of their salts.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2088-93.

1-04972 — WALKER (J.K.) and O'HARA (C.L.). **Analysis of automobile exhaust gases by mass spectrometry.** *Analyt. Chem* (1955), 27, No. 5, 825-8.

1-04973 — WIELE (H.). **Eine Modifikation der Phosphorsaure Bestimmung nach der Lorenz-Methods.** (Modification of the Lorenz-method of phosphoric acid determination). *Z. Analyt. Chem.* (*Fresenius'*); (1955), 144, No. 6, 407-412.

1-04974 — WINTERS (J.C.) and DINERSTEIN (R.A.). **Analytical distillation in miniature columns.** *Analyt. Chem.* (1955), 27, No. 4, 446-60.

1-04975 — WEST (E.M.) and SKOOG (D.A.). **The standardization of ammonium vandate solutions with sodium oxalate** *Analyt. Chem. Acta.* (1955), 12, No. 4, 301-7.

1-04976 — WILLIAMS (H.R.) and MOSHER (H.S.). **Infrared spectra of alkyl hydroperoxides.** *Analyt. Chem.* (1955), 27, No. 4, 517-21.

1-04977 — WOOD (J.H.). **A new organic reagent for the determination of microgram quantities of beryllium by a spectrophotometric mehod.** *Michrochim, Acta.* (1955), No. 1, 11-24.

1-04978 — ZBINOVSKY (V.). **New solvant system for separating monocarboxylic acies (C to C) and dicarboxylic acids (C toC).** *Analyt. Chem.* (1955), 27, No. 5, 764-8.

1-04979 — ZIEGLER (M.) und GLIMSER (O.). **Nachweis und photometrische Bestimmung von Nitrit mit Thioglykolsaure.** (Determination and photometric estimation of nitrite with thioglycolic acid). *Z. Analyt. Chem.* (*Fresenius'*), (1955), 14 No. 3, 187-191.

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1-04980 — AHRLAND (S.) and CHATT (F.). **Three co-ordination in metal complexes.** *Chem. Indian,* (1955), No. 4, 95.

1-04981 — ALAIN (B.D.). **Contribution à l'étude des hydrures métalliques. La systéme lanthane-hydrogène.** *Ann. Phys. Paris,* (1955), No. 10, 305-62.

1-04982 — ALEXANIAN (CH.). **Constations sur la filiation des alumines.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 15, 1621-2.

1-04983 — ASPREY (L.B.), ELLINGER (F.H.), FREID (S.) and ZACHARIASEN (W.H.). **Evidence for quadrivalent curium: X-ray data on curium oxides.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1707-8.

1-04984 — ASSAYAG (P.), DODE (M.) et FAIVRE (R.). **Recherches sur la dissociation de l'oxyde de titane et sur sa réduction par l'oxyde de carbone.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1312-4.

1-04985 — AUBRY (J.) et MARION (F.). **Sur les variations de la composition chimique du protoxyde de fer.** *C. R. Acad. Sci., Paris.* (1955), 240, No. 18, 1770-2.

1-04986 — BALESDENT (D.). **Détermination des chaleurs de formation des oxydes de cuivre.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1884-7.

1-04987 — BANKS (C.V.), HAAR (R.W.V.) and WAL (R.P.V.). **Magnetic studies of nickel (II) and palladium (II) complexe with some** vic-**dioximes.** *J. Amer. Chem. Soc.* (1955), 77, No 2, 324-5.

1-04988 — BOBTELSKY (M.) and GRAUS !B.). **Cerous citrate complexes, their composition, structure and behavior.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1990-3.

1-04989 — BAKER (L.C.W.), FOSTER (G.), TAN (W.), SCHOLNICK (F.), and McCUTCHEON (T.P.). **Some heteropoly- 6-molybdate anions: their formulas, strengths of their free acids, and structural considerations.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2136-42.

1-04990 — BELIAEV (I.N.). **In Russian.** (The double decomposition in the mutual systems of the sulphates and tungstates of lithium and lead). *J. Gen. Chem., Moscow,* (1955), 25, (87), No. 2, 230-4.

1-04991 — BEVILLARD (P.). **Sur une nouvelle classe de réactions de l'indium.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1776-8.

1-04992 — BOGDANOV (G.A.) and PETROVA (G.L.). **In Russian.** (Homogeneous catalysis of $H_2 0_2$ by sodium chromate and new peroxide compounds). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 84-94.

1-04993 — BORYACHEK (A.F.), DROZIN (N.), ZUBAKHINA (Z.K.) and KUTZINA (M.I.). **In Russian.** (Study of the system Na, K./$C0_3$", $S0_4O$ at 10°). *Zh. Prikl. Khim., Leningr.* (1955), 28, No. 1, 100-4.

1-04994 — BRAUER (G.) and RENNER (H.). **Uber Germaniumdioxyd mit geringem Wassergehalt.** (On germanium dioxide with low water content). *Z. Anorg. Chem.* (1955), 278, No. 1/2, 108-112.

1-04995 — BRENET (J.) et GRUND (A.). **Sur les transformations thermiques de divers bioxydes de manganèse.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1210-12.

1-04996 — BULASHEVICH (E.A.). **In Russian.** (A new laboratory method of preparation of phosphorus pentachloride by the chlorination of red phosphorus in carbon tetrachloride). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 4, 431-3.

1-04997 — CARTELDGE (G.H.). **The pertechnetate ion as an inhibitor of corrosion.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2658-9.

1-04998 — CASEY (J.J.), -KATZ (L.) and ORR (W.C.). **Formation of $G_2 0_3$ $2Zr0_2$ in the system $BaCl_3$-BaZ 0_3.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2187-9.

1-04999 — CHABEREK (S.) and MARTELL (A.E.). **Interaction of devalent metal ion with N-hydroxyethylethylenediaminetricetic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1477-80.

1-05000 — CHAIGNEAU (M.). **Sur le cyanure de bore.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1220-2.

1-05001 — CHALEROUX (CH). **Etude de l'action de l'acide chlorhydrique gazeux sur quelques oxydes métalliques.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1218-20.

1-05002 — COCHRAN (C.N.). **Aluminium suboxide formed in reaction of aluminium with alumina.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2190-1.

1-05003 — DAVID (R.). **Sur la non-existence du sous-oxyde de plomb Pb_2 O.** *C.-R. Acad. Sci., Paris,* (1955), 240, No. 7,-782-4.

1-05004 — DEWARDS (F.J.). **The future of quartz and silica.** *J. Soc. Glass. Tech.* (1955), 39, No. 186, 58-60.

1-05005 — DUTTA (R.L.). **Studies in less familiar oxidation states. I. Argentic oxide:a new method of preparation.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 95-6.

1-05006 — DUTTA (R.L.). **Studies in less familiar oxidation states. II. Estimation of argentic oxide.** *J. Indian, Chem. Soc.* (1955), 32, No. 3, 191-2.

1-05007 — DUTTA (R.L.). **Studies in less familiar oxidation states. III. Mechanism of oxidation of thiosolphate by argentic oxide.** *J. Indian, Chem. Soc.* (1955), 32, No. 3, 193-6.

1-05008 — EDDY (L.B.), SMITH (S.H), MILLER (R.R.). **Some physical properties of borazole.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2105-6.

1-05009 — EDWARDS (J.O.), MORRISON (G.C.), ROSS (V.F.) and (J.W.). **The structure of the aqueous borate ion.** *J Amer. Chem. Soc.* (1955), 77, No. 2, 266-7.

1-05010 — ELVING (P.J.) and CALLAHAN (C.M.). **Polarographic behavior of thenoyltrifluoroacetone (TTA) and related compounds. Alkaline cleavage of TTA. Complexation of TTA with borate. Analytical. determination ofTTA.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2077-82.

1-05011 — EPIK (P.A.) and SHUB (N.S.). **In Russian.** (The front course of the reastion of oxidation of arsenite with iodate). *C. R. Acad. Sci., U.R.S.S.*-(1955), 100, No. 3, 503-6.

1-05012 — FARRAN (J.). **Sur l'adhérence entre ciments alumineux et matériaux enrobés.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1235-7.

1-05013 — FIALKOV (Ya.A.) and NAZRENKO (Yu.P.). **In Russian.** (The exchange of sulphate ions in solutions of green chromium sulphate). *C. R. Acad. Sci., U.R.S.S.*)1955), 100, No. 4, 719-22.

1-05014 — FLOYD (J.D.) and GROSS (P.M.). **Solubilities of some strong electrolytes in the hydrogen peroxide-water system I.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1435-7.

1-05015 — GAYER (K.H.) and LEIDER (H.). **Solubility of uranium trioxide, $UO3.HO_2$ in solutions of sodium hydroxide and perchloric acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1448-50.

1-05016 — GEE (G.). **Sulphur:a survey of recent work on the physical chemistry of the element.** *Sci. Progr.* (1955), 43, No. 170, 193-210.

1-05017 — GELLER (S.). **The crystal structures of RhTe and RhTe and $RhTe_2$.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2641-4.

1-05018 — GHOSH (S.P.) and BANERJEE (A.K.). **Complex compounds of nickel and copper with** p-**phenetylbiguanide.** *J. Indian, Chem. Soc.* (1955), 31, No. 1, 32-4.

1-05019 — GIBAUD (M.) et FAUCHERRE (J.). **Sur la constitution des ions complexes du plomb avec la triéthanolamine.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1778-81.

1-05020 — GOEHRING (M.) and HEINKE (J.). **Uber das Trischwefeldistickstoffdioxyd, II.** (On trisulphur-di nitrogen dioxide. II). *Z. Anorg. Chem.* (1955), 278, No. 1/2, 53-57.

1-05021 — GOEHRING (M.), WEISS (J.) and EIRKER (G.). **Uber Metall-Thionitrosylverbindungen. II. Die Thionitrosylate von Blei, Thallium, Kupfer und Silber.** (On metal-thionitrosyl compounds. II. Thionitrosylatis of lead, thallium, copper, and silver). *Z. Anorg. Chem.* (1955), 278, No. 1/2, 1-11.

1-05022 — GOULD (E.S.) and AMENDOLA (A.). **The reactions of two diaryl diselenides with mercury (II) chlorid.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2103-4.

1-05023 — GOUBEAU (J.), RICHTER (D.E.) and BECHER (H.J.). **Gemischt substituierte Verbindungen in der Reihe Bortichlorid-Bortibromid und ihre Schwingungsspektren.** (Mixed substituted compounds in the series boron trichlorid-Boron tribromide and their vibration spectra.) *Z. Anorg. Chem.* (1955), 278, No. 1/2, 12-23.

1-05024 — GRAWFORD (G.H.) and SIMONS (J.H.). **Halogen-silver complexes of the fluorocarbon carboxylic acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2605-8.

1-05025 — GRINBERG (A.A.), KOZLOVA (L.I.), NIKOLSKAYA (L.E.) and SHAGISULTANOVA (G.A.). **In Russian.** (Exchange reactions of the platinum complex compounds). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 7-11.

1-05026 — GUTMANN (V.), NOWOTNY (H.) and OFNER (G.). **Darstellung des wasserfrein Titan(II)-chlorids.** (The preparation of the anhydrous titaminum (II) chloride). *Z. Anorg. Chem.* (1955), 278, No. 1/2, 78-81.

1-05027 — HENRI (CH.) et POURADIER (J.). **Contribution àl étude des complexes argenti-thiosulfate.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1882-4.

1-05028 — JOLIET (J.F.). **Sur la température de fusion des carbures saturés normaux.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 749-51.

1-05029 — JONES (E.R.H.) and MANN (F.G.). **Cylic diarsines. diarsines. II. 1:4-disubstituted diethylendiarsines.** *J. Chem. Soc.* (1955), *Feb.* 401-5.

1-05030 — KREBS (H.). **Der Einfluss homoopolarer Bindungsanteile auf die Struktur anorganischer Salze.** (The effect of homopolar linkage compounds on the structure of in organic salts). *Z. Anorg. Chem.* (1955), 278, No. 1/2, 82-92.

1-05031 — KROHN (I.T.), WARNER !R.C.) and SHAPIRO (H.). **The compounds Na_9Pb_4.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2110-3.

1-05032 — KUKHTENKO (I.I.) and MIKLUKHIN (G.P.). **In Russian.** (Isotopic exchange of elemental sulphur with the sulphur of ammonium thiocyanate, thiurea and sodium diethydithiocarbamate). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 921-3.

1-05033 — KUKOLEV (G.V.) and SIMKHOVICH (Z.I.). **In Russian.** (Kinetics and mechanism of solution of aluminium-magnesia spinel, forsterite and chromite in a caustic soda solution). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 4, 353-62.

1-05034 — LAL (K.) and SINGH (G.). **Action of hydrogen sulphide on potassium metaperiodate.** *J. Indian, Chem. Soc.* (1955), 31, No. 1, 58-60.

1-05035 — LAL (K.) and SINGH (G.). **Action of sulphurous acid on alkaline potassium permanganate.** *J. Indian, Chem. Soc.* (1955), 31, No. 1, 65-7.

1-05036 — LEPOUTRE (G.) et PATTERSON (A.). **Propriétés électriques des solutions de métaux alcalins dans l'ammoniac liquide:l'effet Wien.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1644-6.

1-05037 — LINHARD (M.) and WEIGEL (M.) and WEIGEL (M.). **Uber Komplexverbindungen. XVIII. Fluoro-pentammin-chrom (III) salze.** (On complex compounds CVIII. Fluoro. pentaminine-chrome (III)-salts). *Z. Anorg. Chem.* (1955), 278, No. 1/2, 24-32.

1-05038 — LORIERS (J.). **Séparation des terres yttriques par échange d'ions. Utilisation de l'acide éthylènediamino-tétracétique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 1537-40.

1-05039 — MARKOVSKY (L.Ya), KONDRASCHEV (Yu.D) and KAPUTOVSKAYA (G.V.). **In Russian.** (The composition and structure of magnesium borides). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 6, 1095-8.

1-05040 — MARKOV (B.F.), DELIMARSKY (Yu.K.) and PANCHENKO (I.D.). **In Russian.** (Thermodynamical properties of magnesium chloride in the molten mixtures $MgCl_2$-LiCl, $MgCl_2$-NaCl, $MgCl_2$-KCl, $MgCl_2$-$RbCl_2$. *J. Phys. Chem, Moscow,* (1955), 29, No. 1, 51-61.

1-05041 — McCONNELL (D.). **The problem of the carbonate apatites.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2344.

1-05042 — MERGAULT (P.). **Contribution à l'étude de l'électrolyse de la cryolithe pure et des solutions cryolithiques d'alumine.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 765-7.

1-05043 — MERTON-BINGHAM (B.E.) and PONSNER (A.M.). **Nitrogen peroxide as a catalyst for the autoxidation of hydrobromic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2634-8.

1-05044 — MILBURN (R.M.). **The stability of iron (III)-phenol complexes..** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2064-7.

1-05045 — MITRA (G.) and RAY (N.). **Basic fluoberyllates. I. Basic fluoberyllates of copper, nickel and zinc.** *J. Indian, Chem. Soc.* (1955), 31, No. 1, 43-4.

1-05046 — MITRA (G.). **Hydroxyfluoferriates. I. Hydroxyfluoferriates of Na, K, Ni, Zn and Cd.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 92-4.

1-05047 — MOELLER (T.) and TECOTZKY (M.). **Observations on the rare earths. LXV. Naphthazarin complexes of certain rare earth metal ions.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2649-50.

1-05048 — NELSON (F.). **Anion-exchange studies. XIV. The alkali metals in ethylenediaminetetraacetic acid solutions.** *J. Amer. Chem. Soc.* (1955), No. 3, 813-4.

1-05049 — NELSON (F.) and KRAUS (K.A.). **Anion-exchange studies. XII. Adsorption of acids by strong base anion-exchange resines in polyvalent forms. Separation of weak and strong acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 329-31.

1-05050 — NESMEYANOV (A.N.), PEREVALOVA (E.G.) and NESMEYANOVA (O.A.). **In Russian.** (Halogen compounds of ferrocene). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 6 1099-101.

1-05051 — NOSOVA (Z.A.) and YADOVLEVA (M.E.). **In Russian.** (The microscopic investigation of the dullness of boron-lead enamels). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 3, 529-31.

1-05052 — ONSTOTT (E.I.). **The preparation of samarium metal with calcium.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 812-3.

1-05053 — OVCHINNIKOVA (T.M.), IOFFE (E.Sh) and ROTINIAN (A.L.). **In Russian.** (Transformations of the hydrates of cobalt oxides on heating). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 3, 649-71.

1-05054 — PANNETIER (G.) et SICARD (A.). **Domaines d'inflammabilité de mélages de protoxyde d'azote et de cyanogène sous des pressions égales ou inférieures à la pression atmosphérique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1345-7.

1-05055 — PFLAUM (R.T.) and BRANDT (W.W.). **Metal-amine coordination compounds. IV. Copper (I) complexes.** *J. Amer. Chem. Soc.* (1955), 77, No. 2019-22.

1-05056 — PICON (M.) et FLAHAUT (J.). **Sur les propriétés des sulfures d'uranium S_5 U_3 et S_2 U_2.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 784-5.

1-05057 — PROTZENKO (P.I.) and RUBLEVA (V.V.). **In Russian.** (The interaction between the nitrates and the nitrites of the first and second groups of D.I. Mendeleev's periodic system in the liquid phase. XVI. Investigation of the ternary system of the nitrates of caesium, thallium and cadmium). *J. Gen. Chem., Moscow,* (1955), 25, (87), No. 2, 238-43.

1-05058 — PROTZENKO (P.I.) and BELOVA (Z.I.). **In Russian.** (The interaction between the nitrates and the nitrites of the first and second groups of D.I. Mendeleev's periodic system in the liquid phase. XVII. Investigation of the ternary system of the nitrates of rubidium, caesium and calcium). *J. Gen. Chem., Moscow,* (1955), 25, (87), No. 2, 244-9.

1-05059 — RAUSCH (M.D.), McEWEN (W.E.) and KLEINBERG (J.). **Anodic oxidation of some active metals in pyridine.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2093-6.

1-05060 — RICE (F.O.) and SCHERBER (F.). **The hydrazino radical and tetrazane.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 291-3.

1-05061 — RIVKIND (A.I.). **In Russian.** (Investigation of complex formation in solutions by the method of protinic resonance). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 5, 933-6.

1-05062 — ROLLET (A-P) et BOUAZIZ (R.). **L'isotherme 30 du système ternaire:eau-oxyde de lithium-anhydride borique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1227-9.

1-05063 — SAMANTORA (K.C.), RAO (D.V.R.) and PANI (S.). **Tartrate complex of trivalent antimony. I,** *J. Indian, Chem. Soc.* (1955), 32, No. 3, 165-6.

1-05064 — SAMANTORS (K.C.), RAO (D.V.R.) and PANI (S.). **Tartrate complex of trivalent antimony. II.** *J. Indian, Chem. Soc.* (1955), 32, No. 3, 197-8.

1-05065 — SCHAEFFER (G.W.) and BASILE (L.J.). **The reaction of lithium amide with diborane.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 331-2.

1-05066 — SCHUMB (W.C.) and SYMTH (D.M.). **The partial hydrolysis of germanium tetrachloride.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2133-6.

1-05067 — SEDEK (H.). **Mixtures of arsenic and hydrochloric acids in glacial acetic acid.** J. *Indian, Chem. Soc.* (1955), 32, No. 3, 176-8.

1-05068 — SELIVANOVA (N.M.) and BOGUSLAVSKY (R.Ya) **In Russian.** (Solubility of lead selenate in aqueous solutions of alkali metals selenates). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 128-34.

1-05069 — SELWOOD (P.W.), ADLER (S.) and PHILIPS (T.R.). **Thermomagnetic analysis of supported nickel catalysts.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1462-8.

1-05070 — SEN (D.N.), MIZUSHIMA (S.) CURRAN (C.) and QUAGLIANO (J.V.). **Infrared absorption spectra of inorganic coordination complexes. I. The nature of chelation boning in bis-(glycino)-copper (II) Monohydrate and bis-(glycino)-nickel (II) dihydrate.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 211-2.

1-05071 — SHAPIRO (I.) and KELLIN (B.). **Self-exchange of of boron in boron hydrides.** *J. Amer. Chem. Soc.* (1955), 77, No. 2663.

1-05072 — SHUSHUNOV (V.A.) and PAVLOV (A.). **In Russian.** (Synthesis of potassium, sodium and calcium cyanamides). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 98-100.

1-05073 — SLOTH (E.N.) and GARNER (C.S.). **Exchange of radioiridium between hexachloroiridate (II) and hexachloroiridate (IV) ions.** *J. Amer. Cgem. Soc.*, (1955), 77, No. 6, 1440-4.

1-05074 — SMAGINA (E.I.) and ORMONT (B.F.). **In Russian.** (The heat of formation of nickel carbonyl), *J. Gen. Chem., Moscow,* (1955), 25, (87), No. 2, 224-30.

1-05075 — SMIALOWSKI (M.) and OSTROSSKA (T.). **The influence of fatty acids on the polarisation curves of iron in ammonium nitrate.** *Bull. Acad. Polonase. Soc.* (1955), 3, No. 1, 29-30.

1-05076 — SMIRNOVA (I.I.). **In Russian.** (Auto-catalysis in solid bodies in the light of the example of the thermal decomposition of potassium permanganate). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 135-41.

1-05077 — SPRYSKOV (A.A.). **In Russian.** (Reaction of perchloric acid with sulphur anhydride). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 937-8.

1-05078 — STEPHENSON (G.E.). **The story of fused silica.** *J. Soc. Glass. Tech.* (1955), 37, No. 186, 37-47.

1-05079 — STUTES (J.G.), SALUTSKY (M.L.) and STONE (B.D.). **Preparation actinium metal.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 237-40.

1-05080 — STRAUMANIS (M.E.) and BALLASS (J.I.). **Die Reaktion des metallischen Titans, Zirkons, Hafniums und Thoriums mit Säuren, insbesondere mit Fluorwasserstoffsäure.** (Reaction of metallic titmum, zirconium, hafnium and thorium with acids, in particular with hydrofluoric acid). *Z. Anorg. Chem.* (1955), 278, No. 1 2, 33-41.

1-05081 — ST. PIERRE (P.D.S.). **The preparation of dicalcium phosphate dihydrate and calcium pyrophosphate.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2197-8.

1-05082 — TYLOR (W.L.), GRISWOLD (E.) and KLEINBERG (J.). **Reactions of some aikali and alkaline earth metals with aluminum (III) iodide in liquid ammonia.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 294-8.

1-05083 — TAYLOR (M.D.) and GRANT (L.R.). **New preparations of anhydrous iodides of groups I and II metals.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1507-8.

1-05084 — TAYLOR (M.D.), GRANT (L.R.) and SANDS (C.A.). **A convenient preparation of pyridine-borane.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1506-7.

1-05085 — TOREN (P.E.) and KOLTHOFF (I.M.). **N,N-Dihydroxyethylglycine and its complexes with iron.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2061-4.

1-05086 — TROMBE (F.) et FOEX (M.). **Préparation de zircone pure par fusion alcaline du zircon au four solaire.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1225-7.

1-05087 — TUROMSHINA (U.F.) and STENDER (V.V.). **In Russian.** (The current output and the cathode potentials in the electrolysis of zinc sulphate solutions in the presence of ions of metals more electronegative than zinc). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 2, 166-74.

1-05088 — UNDERWOOD (A.L.), TORIBARA (Y.Y.) and NEUMAN (W.F.). **An infrared study of the nature of bone carbonate.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 317-9.

1-05089 — VEDENEEVA (N.E.) and RATEEV (M.A.). **In Russian.** (Beydelite with an anomalous behaviour of the methylene blue adsorbed on its surface). *C. R. Acad. Sci., U.R.S.S.* (1955), (1955), 100, No. 3, 559-62.

1-05090 — VOLF (F.F.), RYAZANTZEVA (O.F.) and KUZNETZOV (S.I.). **In Russian.** (Influence of sodium sulphide on the process of decomposition of aluminate solutions). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 3, 319-22.

1-05091 — VORRES (K.S.) and DUTTON (F.B.). **The fluorides of titanium:X-ray powder data and some other observations.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2019.

1-05092 — WANMAKER (W.L.), HOEKSTRA (A.H.) and TAK (M.G.A.). **The preparation of calcium halophosphate.** *Philips Res. Rep.* (1955), 10, No. 1, 11-38.

1-05093 — WATT (G.W.) and HAHN (H.T.). **The ammonolysis of the halides of carbon (IV).** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 312-7.

1-05094 — WHEELER (C.M.) and SANDSTEDT (R.A.). **Reaction of dimethyl ether-boron trifluoride with quanternay alkyl ammonium halides.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2024-5.

1-05095 — WHEELER (C.M.) and SANDSTEDT (R.A.). **Preparation of substituted quaternary ammonium fluoborates.** *J. Amer. Chem. Soc.* (1055), 77, No. 7, 2025-6.

1-05096 — WOLFE (C.W.), BLOCK (M.L.) and BAKER (L.C.). **The dimeric nature and crystallographic untit cell of ammonium 6-molybdochromiate.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2200.

1-05097 — YANATIEVA (O.K.). **In Russian.** (The solubility of the system $CaC0_3$-$MgC0_3$-H_2O at different temperatures and under different pressures of $C0_2$). *J. Gen. Chem., Moscow,* (1955), 25, No. 2, 234-7.

1-05098 — ZELIKMAN (A.N.). **In Russian.** (Study of the reaction of mineral molybdenite with molybdenum trioxide). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 6, 1083-5.

1-05099 — ZIMMER (H.), AUDRIETH (L.F.), ZIMMER (M.), and ROWE (R.A.). **The synthesis of unsymmetrically disubstituted hydrazines.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 790-3.

E 4. ORGANIC CHEMISTRY

1-05100 — ABE (Y.) HARUKAWA (T.), ISHIKAWA (H.), MIKI (T.) and SUMI (M.). **Nomenclature of santonin and related compounds.** *Chem. Ind.* (1955), No. 4, 91.

1-05101 — ADELMAN ((R.L.). **Vinyl ether-alcohol interchange.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1669-70.

1-05102 — AINSOWORTH (C.) and JONSE (R.G.). **Isomeric and nucleearsubtituted p-aminoethyl-1.2,4-triazoles.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 621-4.

1-05103 — AKIYSHI (S.) and MATSUDA (T.). **Eight-membered ring compounds. I. Reaction of cyclooctatetraene with ethyl diazoacetate.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2476.

1-05104 — AKOPIAN (A.E.). **In Russian.** (Polymerization of 3-chlorohexadiene-2,4-ol-1 and its ethers). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 94-7.

1-05105 — ALLEN (C.F.H.), DAVIS (T.), STEWART (D.W.) and VANALLEN (J.A.). **The infrared absorption of carbonyl croups in bridged compounds II. Endocarbinols.** *J. Org. Chem.* (1955), 20, No. 3, 310-4.

1-05106 — ALLEN (C.F.H.) and VANALLEN (J.A.). **The structure of Happ's indanone.** *J.Org. Chem.* (1955), 20, No. 3, 315-22.

1-05107 — ALLEN (C.F.H.) and VANALLEN (J.A.). **The reduction of certain polyarylated indenones.** *J. Org. Chem.* (1955), 20, No. 3, 328-5.

1-05108 — ALLEN (C.F.H.) DAVIS (T.), STEWART (D.W.) and VANALLEN (J.A.). **The infrared absorption of carbonyl croups in bridged compounds.** *J. Org. Chem.* (1955), 20, No. 3, 306-9.

1-05109 — ALLEN (C.F.H.) and VANALLEN (J.A.). **Acribonyl bridge compound in which the bridged ring is saturated.** *J. Org. Chem.* (1955), 20, No. 3, 323-7.

1-05110 — ALLEN (C.F.H.) and VANALLAN (J.A.). **The structure of certain diphenylcyclopentenones.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2315-7.

1-05111 — AMIRKHANOV (Kh. I.), GURVICH (I.G.) and MAMATIZEN (E.V.). **In Russian.** (The heat capacity of the system phenol-water in the critical region). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 4, 735-6.

1-05112 — ANDERSON (H.H.). **Trisopropylgermanium esters.** *J. Org. Chem.* (1955), 20, No. 4, 536-41.

1-05113 — ANDREüS (L.J.) and KEEFER (R.M.). **The relative rates of reaction of hexamethylbenzene and hexaethlbenzene with perbenzoic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2545-7.

1-05114 — ANDREWS (P.), HOUGH (L.) and JONES (J.K.N.). **Methylene derivatives of L-rhamnose.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 125-30.

1-05115 — ANDERSON (C.L.), HORTON (W.J.), WALKER (F.E.) and WEILER (M.R.). **Seven-membered ring compounds. IX. Benzouberonegly oxylates.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 598-601.

1-05116 — ANDREEV (D.N.). **In Russian.** (Condensation of methyltrichlorosilane under the action of silent discharges). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, 4, 697-700.

1-05117 — ASTLE (M.J.) and PIERCE (J.B.). **The preparation of 2-aminothiazole from cyclic acetals.** *J. Org. Chem.* (1955), 20, No. 2, 178-81.

1-05118 — AUDRIETH (L.F.) and GORDON (P.G.). **Hydrazine derivatives of the caybonic and thiocarbonic acids. V. Allophanyl hydrazide and its derivatives.** *J. Org. Chem.* (1955), 20, No. 2, 244-9.

1-05119 — AUSTERWEIL (G.V.) et PALLAUD (R.). **Cétolisations par catalyse ménagée à l'aide d'échangeurs d'anions.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1218-9.

1-05120 — BAILEY (W.J.) and PFEIFER (C.R.). **Acetylenes. II. A convenient one-step synthesis of allenes.** *J. Org. Chem.* (1955), 20, No. 1, 95-101.

1-05121 — BAILEY (W.J.) and FUJIWQRA (E.). **Acetylenes. I. Mixed dihalides and halohydriss from butynediol.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 165-6.

1-05122 — BAILEY (W.J.), HEWITT (J.J.) and KING (C.). **Pyrolysis of esters. 11. Direction of elimination in pyrolysis of tertiary esters.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 357-9.

1-05123 — BAILEY (W.J.) and LAWSON (W.B.). **Cyclic dienes. XIV. 2,3-Dimethylenebicyclo (2.2.1) heptane.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1606-8.

1-05124 — BAILEY (W.J.) and KING (C.). **Pyrolysis of esters. selectivity in the direction of elimination by pyrolysis.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 75-7.

1-05125 — BAILEY (W.J.) and ROSENBERG (J.). **Cylic dienes. IX. Synthesis of 1,2-dimethylene-4-cyclohexene.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 73-5.

1-05126 — BAILEY (W.J.) and BELLO (J.). **Polar effects in brominations with N-bromosuccinimide.** *J. Org. Chem.* (1955), 20, No. 4, 525-9.

1-05127 — BAKER (B.R.) and McEVOY (F.J.). **An antimalarial aldaloid from Hydrangea. XXII. Synthesis by the pyridine approach. I.** *J. Org. Chem.* (1955), 20, No. 1, 118-35.

1-05128 — BAKER (B.R.) and SCHAUB (R.E.). **Puromycin. Synthetic studies. XII. Synthesis of the d-anomer of 6-dimethymino-9-(3'amino-3'deoxy-D-ribofuranosyl-)purine.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2396-9.

1-05129 — BAKER (B.R.), JOSEPH (J.P.) and WILLIAMS (J.H.). **Puromycin. Synthetic studies VII. Partial synthesis of amono acid analogs.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 1-7.

1-05130 — BAKER (B.R.), SCHAUB (R.E.) and WILLIAMS (J.H.). **Puromycin. Synthetic studies VIII. Synthesis of 3-amino-3-deoxy-D-ribofuranoiside dervatives. A second synthesis of 3-amino-3-deoxy-D-ribose.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 7-12.

1-15531 — BAKER (B.R.), SCHAUB (R.E.), JOSEPH (J.P.) and WILLIAMS (J.H.. **Puromycin. Synthetic studies IX. Total synthesis.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 12-5.

1-05132 — BAKER (B.R.) and JOSEPH (J.P.). **Puromycin synthetic studies. X. A novel breakdown of the purine ring system.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 15-8.

1-05133 — BAKER (B.R.) and McEVOY (F.J.). **An antimalarial alkaloid from Hydrangea. XXIII. Synthesis by the pyridine approach. II.** *J. Org. Chem.* (1955), 20, No. 1, 136-42.

1-05134 — BAKDRIDGE (H.D.), McCARVILLE (W.J.) and FRIESS (S.L.). **Narure of the actyl cholinesterase surface. III Enzymatic response to cis-trans isomers in the cyclohexane series as mapping agents.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 739-41.

1-05135 — BALLOU (C.E.), FISCHER (H.O.L.) and MacDONALD (D.L.). **The synthesis and properties of D-crythrose-4-phosphate.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2658.

1-05136 — BALTAZZI (E.). **A propos des deux formes géométriques de l'd-phénvalcétamino B-pipéridinoacrylate d'éthyle.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 17, 1711-3.

1-05137 — BALTZLY (R.), IDE (W.S.) and PHILIPS (A.P.). **The mechanims of the Fries reaction.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2522-33.

1-05138 — BALTZLY (R.), LORZ (E.), RUSSELL (P.B.) and SMITH (F.M.). **The addition of secondary amines to some d-benzal ketones.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 624-8.

1-05139 — BANERJEE (D.K.), CHATTERJEE (S.) and BHATTACHARYA (S.P.). **Synthesis of 1-methyl-trans-2decalone 2,3,4,4,a,4b,5,6,7,8,8,a,9,10-dodecahydro-2-phenanthrone.** *J. Amer Chem. Soc.* (1955), 77, No. 2, 408-10.

1-05140 — BANERJI (J.C.). **Preparation of 2:5-and 2:7-dimethylbenzthiazoles.** *J. Indian, Chem. Soc,* (1955), 32, No. 2, 135-6.

1-05141 — BARAKAT (M.Z.), ABDELWAHAB (M.F.) and ELSADR (M.M.). **Some reactions with N-bromosuccinimide.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1670-2.

1-05143 — BARKENBUS (C.) and BROWER (F.M.). **The decomposition of tetraphenylthiodiacetic acid and certain related compounds in pyridine solution at room temperature.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 579-8.

1-05144 — BARLOUTAUD (R.), GRJEBINE (T.) et RIOU (M.). **Excitation par interaction coulombienne du thallium.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1207-10.

1-05145 — BARKENBUS (C.) and PANZERA (P.). **The preparation of some phenyl substituted 3,5-thiamorpholinediones as possible anticonvulsants.** *J. Org. Chem.* (1955), 20, No. 2, 237-43.

1-05146 — BAUMGARTEN (H.E.) and KRIEGER (A.L.). **Naphthyridines. I. Synthesis of some 1,7-naphthyridines.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2438-40.

1-05147 — BECKER (E.J.) and WALLIS (E.S.). **Molecular rearrangements in the sterols X. The rearrangements of epicholesteryl toluene sulfonate and the chemistry of some isomeric cholesterols.** *J. Org. Chem.* (1955), 20, No. 4, 353-62.

1-05148 — BENDER (M.L.) and GINGER (R.D.). **Intermediates in the reactions of carboxylic acid derivatives. IV. The hydrolysis of benzamide.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 348-51.

1-05149 — BENINGTON (F.), MORIN (R.D.) and CLARK (L.C.). **Mescaline analogs. II. Tetra-and penta-methoxy- p-phenethylamines.** *-J. Org. Chem.* (1955), 20, No. 1, 102-8.

1-05150 — BERGMANN (E.D.). **Structure of isatyde, sulfisatyde and some other indole derivatives.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1549-51.

1-05151 — BERGMANN (F.), KALMUS (A.) and VROMEN (S.). **W-Fluoroacetophenone. II. Substitutions in the fluoromethyl group.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2494-6.

1-05152 — BERLINER (E.), NEWMAN (B.) and RIABOFF (T.M.). **Nucleophilic displacement in the biphenyl series.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 478-80.

1-05153 — BERLIN (A.Ya) and SOKOLOVA (L.V.). **In Russian.** (The oxidation of w-acetoxyhexahydroacetophenone). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 344-7.

1-05154 — BERLIN (A.Ya) and SOKOLOVA (L.V.). **In Russian.** (Investigation of the conversion of 1,1-pentamethylent-glycerol-2,3-diacetate into w-acetoxyhexahydroacetophenone). *J. Gen. Chem., Moscow,* (1955), 25, (87), No. 2, 347-58.

1-05155 — BERNSTEIN (S.) and LENHARD (R.H.). **Steriodal cylic ketals. XIV. Preparation of pregnane 5X,21-diol-3,20-dione and pregnane-5x, 11p, 17x, 21-tetrol-3,20-dione.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2233-7.

1-05156 — BERNSTEIN (S.) and LENHARD (R.H.). **Steroidal cylic ketals. XIII. The conversion of 11-epi-corticosterone into orticosterone.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2331-2.

1-05157 — BERNHARD (R.A.) and NEIEMANN (C.). **Absence of wall effects in a typical x-chmotrypsin catalyzed hydrolysis.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 480-1.

1-05158 — BERSON (J.A.) and BROW6 (E.). **Studies on dihydropyridines. II. The photochemical disproportionation of 4-(2'nitrophenyl) -1,4-dihydropyridines.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 447-50.

1-05159 — BERSON (J.A.) and BROWN (E.). **Studies on dihydropyridines. III. An absolute asymmetric synthesis and an attempted conversion of carbon atom asymmetry to biphenyl asymmetry.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 450-3.

1-05160 — BERSON (J.A.) and BROWN (E.). **Studies on dihydropyridines. I. The preparation of unsymmetrical 4x-ryl-1-1,4-dihydropyridines by the Hantzsch-Beyer synthesis.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 444-7.

1-05161 — BHARGAVA (P.M.) and HEIDELBERGER (C.). **Partition chromatographic separation of aromatic acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 166-8.

1-05162 — BHARGAVA !P.N.) and KAUL (C.L.). **Studies on 3-o-tolyl-2-o-tolylimino-4-thiazolidone.** *J. Indian, Chem. Soc.* (1955), 31, No. 1, 49-51.

1-05163 — BIEL (J.H.), SPRENGELER (E.P.), LEISER (H.A.), HORNER (J.), DRUKKER (A.) and FRIEDMAN (H.L.). **Antispasmodi s. II. Derivatives of N-Substitued-3-piperidols.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2250-6.

1-05164 — BINKLEY (F.). **Catalytic cleavage of thiothers.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 501.

1-05165 — BLAIR (F.) and NEWBOLD (G.T.). **The structure of mellein.** *Chem. Ind.* (1955), No. 4, 93-4.

1-05166 — BLICKE (F.F.) and LU (C.). **Antispasmodics. XIX. Esters of 1-methyl-2-(hydroxymethyl)-pyrrolidine and I-methyl-2-2(hydroxymethyl)-piperidine.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 29-31.

1-05167 — BLICKE (F.F.) and TOY (G.R.). **Antispasmodics. XX. Basic 1, 3-dioxanes.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 31-2.

1-05168 — BLICKE (F.F.) and MILSON (H.E.). **Antispasmodics XXI. Basic 1,3,-dioxolanes.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 32-5.

1-05169 — BLIZNYUKOV (V.I.) and REZNIDOV (V.M.). **In Russian.** (Absorption spestra and structure of substuted quinolines used as starting products in the synthesis of antimalarials. II. The tautomerism of 2-and 4-methylpyridines). *J. Gen. Chem., Moscow*, (1955), 25, (87), No. 2, 401-10.

1-05170 — BLOMQUIST (A.T.) and VERDOL (J.A.). **1,2-Dimethylenecyclobutane.** *J. Amer. Chem. Soc.* (1955), 77, No. & 1806-9.

1-05171 — BLOMQUIST (A.T.) and VERDOL (J.A.). **2-Vinyl--1,3-butadiene.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 81-3.

1-05172 — BLOMQUIST (A.T.) and VERDOL (J.A.). **The thermal isobuthylene-formaldehyde condesation.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 78-80.

1-05173 — BLOMQUIST (A.T.), PRAGER (J.), and WOLINDKY (J.). **Many membered car on rings. X. Reduction of diametric diketones to monoketones.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1804-6.

1-05174 — BOEDTKER (H.) and DOTY (P.). **On the nature of the structural element of collagen.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 248-1.

1-05175 — BOLDYREV (B.G.) and MAKITRA (R.G.). **In Russian.** (Synthesis of 2,8-dichloro-adenine). *Zh. Prikl. Khim., Leningr*, (1955), 28, No. 4, 422-7.

1-05176 — BOLOTOV (B.A.), DOLGOV (B.N.) and ADROV (P.M.). **In Russian.** (The catalytic conversion of ethyl alcohol into acetone and methylpropylketone). *Zh. Prikl. Khim., Leningr*, (1955), 28, No. 3, 299-306.

1-05177 — BONNER (W.A.) and COLLINS (C.J.). **Molecular rearrangements IV. Triple-labeling experiments on the isotope position isomerization of 1,2,2, triphenylethyl acetate.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 99-103.

1-05178 — BORDWOLL (F.G.) and PITT (B.M.). **The formation of d-chloro sulfides from sulfides and from sulfoxides.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 572-7.

1-05179 — BOUDET (R.). **Synthèse et étude de divers N-benzyl thiamides.** *Ann. Chem.* (1955), 10, 187-224.

1-05180 — BRADLEY (A.) and HILL (M.E.). **Ester cleavage in 100% sulfuric acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1575-8.

1-05181 — BRADSHER (C.K.) and BEAVERS (L.E.). **Aromatic cyclodehydration. XXIX. 7-methyl- and 7-phenylbenzol(x) quinolizinium salts.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 453-5.

1-05182 — BRESSLER (W.L.) and CIERESZKO (L.S.). **Some p-arsenic substituted derivatives of phenylalanine.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2330-1.

1-05183 — BRICH (A.J.) and HEXTALL (P.). **Reduction by dissolving metals. XII. The conversion of 2,5 into 2,3-dihydroanisoles by means of porassium amide in ammonie.** *Aust. J. Chem.* (1955), 8, No. 1, 96-9.

1-05184 — BRICH (A.J.) and SLAYTOR (M.). **The use of Mannich base methiodides in the diene reaction.** *Aust. J. Chem.* (1955), 8, No. 1, 144.

1-05185 — BOOK (A.G.) and GILMAN (H.). **Base-catalyzed elimination reactions of triphenylsilanecaroxylic acid and its derivatives.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2322-5.

1-05186 — BOWN (H.C.) and CAHN (A.). **Steric effect in displacement reactions. II. The rates of reaction of alkyl iodides with the monoalkylpyridines. Steric strain in the activated complex..** *J. Amer. Chem. Soc.* (1955), 77, No. 1715-23.

1-05187 — BROWN (H.C.) and HOROWITZ (R.H.). **Steric effects in displacement ractions. VI. The heats of formation of the addition compounds of boron trifluoride with the monoalkylpyridines. A linear relationship involving stericaly hindered reactants.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1733-7.

1-05188 — BOWN (H.C.) and HOLMES (R.R.). **Steric effects in displacement reactions. IV. Heats of reaction of methanesulfonic acid with the monoalkylpyridines.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1727-30.

1-05189 — BROWN (H.C.) and HOROWITZ (R.H.). **Steric effects in displacement reactions. V. Heat of reaction of pyridine with boron trifluoride A convenient calorimeter for measuring the heat of formation of molecular addition compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1730-3.

1-05190 — BROWN (H.C.) and MCCRAY (C.W.). **The rates of mercuration of the monalkyl-and the polymethylbenzenes. Calculation of relative reactivities for the mercuration reactions.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2310-2.

1-05191 — BROWN (H.C.) and McGARY (C.W.). **Rates and isomer distribution in the mercuration of benzene and toluene. A proposed extension of the quantitative relationship governing isomer distribution in aromatic substituion.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2300-6.

1-05192 — BROWN (H.C.) and McGARY (C.W.). **The effect of perchloric acid on the reactivity raio and isomer distribution in the mercuration of benzene and toluene. Modification of the activity and selectivity of an electrophilic substituting agent.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2306-10.

1-05193 — BROWN (H.C.) and MIHM (X.R.). **Steric effects in displacement reactions. III. The base strengths of pyridine, 2,6-lutidine and the monalkylpyridines.** *J. Amer. Chem. Soc* (1955), 77, No. 7, 1723-6.

1-05194 — BROWN (R.D.). **The chemistry of glyoxaline, pyrrole, and pyrazole.** *Aust. J. Chem.* (1955), 8, No. 1, 100-6.

1-05195 — BROWN (N.), HARTIG (M.J.), BOEDEL (M.J.), ANDERSON (A.W.), and SCHWEITZER (C.E.). **Cycloalkanone peroxides. I. Preparation of "Cyclohexanone peroxide" by oxidation of cyclohexanol.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1856-9.

1-05196 — BROWN (N.), ANDERSON (A.W.) and SCHWEITZER (C.E.). **Cycloalkanone peroxides. II. Nature of peroxides produced by oxidation of cyclopentanol.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1760-1.

1-05197 — BRUNNSTROM (G.). **The alkaline oxidation of 2-napthol.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2463-5.

1-05198 — BUESS (C.M.) and BAUER (L.). **The action of arenesulfonyl chloride on phthalohydroxamic acid, succinohydroxamic acid, and "phthalic anhydride oxime".** *J. Org. Chem.* (1955), 20, No. 1, 33-7.

1-05199 — BUHLER (D.R.), THOMAS (R.C.) CHRISTENSEN (B.E.) and WANG (C.H.). **Epimerization and fragmentation of glucose by quaternary ammonium base type anion exchange resins.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 481-2.

1-05200 — BURKE (C.E.) and FOSTER (A.B.). **Ionophoresis of the adenosine phosphates.** *Chem. & Ind.* (1955), No. 4, 94.

1-05201 — BULTER (G.B.). **Two-stage polymerizations. III. Infrared evidence for the course of polymerization of vinyl ethers of unsaturated phenols.** *J. Amer. Chem. Soc.* (1955), 77, No. , 48 -4.

1-05202 — BUTLER (G.B.) and ANGELO (R.J.). **The course of the reaction of 1,4- and 1,5-dihalo- and di-(arylsulfonoxy)-alkanes with diallylamine.** *J. Amer. Chem. Soc.* (1955), 77, No. 7 1767-9.

1-05203 — BUTCHER (W.W.) and WESTHEIMER (F.H.). **The lanthanum hydroxide gel promoted hydrolysis of phosphate esters.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 4 0-4.

1-05204 — BUU-HOI (N.), SY (M.) et DAT TUONG (N.). **Nouvelle synthèse totale des acides dihydrohydnocarpique, dihydrochaulmoogrique, et d'acides alicycliques analogues.** *C. R. Acad. Sci., Paris,* (1955), 40, No. 7, 585-7.

1-05205 — CAIN (C.K.), PLAMPIN)J.N.) and SAM (J.). **Dihydroergot relatives!: quinolinecarboxymides and esters.** *J. Org. Chem.* (1955), 0, No. 4, 466-74.

1-05206 — CAMP (A.T.), MARANS (N.S.), ELRICK (D.E.) and PRECKEL (R.F.). **A new synthesis of pentaerythritol trinitrate.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 751- .

1-05207 — CARPENTER (M.S.) and FASTER (W.M.). **The isopropyl cresols.** *J. Org. Chem.* (1955), 0, No. 4, 401-11.

1-05208 — CARTER (C.E.) and COHEN (L.H.). **Enzymatic synthesis of adenylosuccinic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 499-500.

1-05209 — CARLIN (R.B.) and HEININGER (S.A.). **Benzidine rearrangement. VI. Rearrangement of 3,3'5,5'-tetrafluorohydrazobenzene in sulfuric acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2272-7.

1-05210 — CASON (J.) and GILLIES (G.A.). **Adsorption and chromatography of fatty acids on ch rcoal.** *J. Org. Chem.* (1955), 0, No. 4, 419-27.

1-05211 — CAUGHEY W(S.) and GORWIN (A.H.). **The stability of metalloetio-porphyrins towards acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1509-13.

1-05212 — CAUQUIL (C.) et CASADEVALL (A.). **La réaction du N-méthylformanilide avec quelques alcoyl-10 phénothiazines et alcoyl-10 'phénothiazines à substitution nucléaire.** *C. R. Acad. Sci., Paris,* (1955), 40, No. 19, 1784-7.

1-05213 — CHALKLEY (L.). **Hydrophilic dye cyanides. I. Ethyl green and xylene blue cyanides.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1848-50.

1-05214 — CHAMPETIER (G.), MONTEDUDET (G.) et PETIT (J.). **Obtention de dérives aminés de la cellulose.** *C. R. Sci., Paris,* (1955), 40, No. 19, 1896-7.

1-05215 — CHATTERJEE (D.N.). **Spiro compounds. I. Synthesis of 1.2,3,4-tetrahydronaphthalene-2,2spiro-(2'n-propylcy-clopen-tane and its rearrangement on catalytic dehydrogenation.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 414-16.

1-05216 — CHODKIEWICZ (W.), CADIOT (P.) et WILLEMART (A.). **Préparation en deux temps de glycols a-acétyléniques tétraarylés:Etude "des phénomènes de permutation" et passage aux butatriènes correspondants.** *C. R. Aca . Sci., Paris,* (1955), 240, No. 14, 1554-6.

1-05217 — CHOPRA (N.M.), COCKER (W.) and EDWARD (F.T.). **Interconversions of the desmotroposantonins.** *Chem. Ind.* (1955), No. 7, 41.

1-05218 — CIFONELLI (M.), CIFONELLI (J.A.), MONTGOMERY (R.) and SMITH (F.). **The chemistry of 2, 5-anhydro-L-arabinose.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 121-5.

1-05219 — CLEAVER (C.S.) and PRATT (B.C.). **Polyamides from 2,2'-bis(-$^{5}_{4}$H)-oxazolones).** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1541-3.

1-05220 — CLEAVER (C.S.) and PRATT (B.C.). **Synthesis of 2,2'-bis(5 (4H)-oxazolones).** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1544-6.

1-05221 — CLAFF (C.E.) and MORTON (A.A.). **The metylation of toluene by potassium and sodium.** *J. Org. Chem.* (1955), 2 No. 4, 440-2.

1-05222 — CLARKE (R.L.), DOBRINER (K.), MOORADIAN (A.) and MARTINI (C.M.). **The reaction of lead tetraacetate with progesterone and test sterone.** *J. Amer. Chem. Soc.* (1955). 77, No. 3, 661-4.

1-05223 — COAN (S.B.), TRUCKER (D.E.) and BECKER (E.I.). **The absorption spectra of tetracyclones. IV.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 60-6.

1-05224 — COCKBURN (W.F.) and McKAY (A.F.). **4-Azabicyclo (2,2,2,) octane-l-thonium halides. A new ring system.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 397-400.

1-05225 — COHEN (S.G.) and WANG (C.H.). **Azo-bis-diphenylmethane and the decomposition of aliphatic azo compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2457-60.

1-05226 — COLBERT (J.C.), FOX (D.W.) and MATUSZAK (C.). **Nitration of 3-hydroxybiphenyl.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2447-50.

1-05227 — COLLINS (C.J.) and BONNER (W.A.). **Molecular rearrangements. III. The mechanism of the wagner-Meerwein rearrangement in the 1,2,2, triphenylethyl system.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 92-9.

1-05228 — COLONGE (J.) et BIOSDE (P.). **Synthèse de composés tétrahydropyranniques à partir des alcools éthyléniques.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 552-4.

1-05229 — CONIA (J-M.). **Sur l'isoxylitone.** *C. R. Aacad. Sci., Paris,* (1955), 240, No. 14, 1545-8.

1-05230 — COOK (C.D.), INSKEEP (R.G.), ROENBERG (A. S.) and CURTIS (E.C.). **2,5-Di-t-butyl-4-methoxyphenol and 2,6-Di-t-bytyl-4-methoxyphenol.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1672-4.

1-05231 — COOK (C.D.), NASH (N.G.) and FLANAGAN (H.R.). **Oxidation of hindered phenols. III. The rearrangment of the 2,6-di-t-butyl-4-methylphenoxy radical.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1783-5.

1-05232 — COPE (A.C.) and BAXTER (W.N.). **Aminoalcohols containing the 8-oxa-3azabicyclo (3.2.1.) octane ring system and their benzoates.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 393-6.

1-05233 — COPE (A.C.), McLEAN (D.C.) and NELSON (N.A.). **Cylic polyolefisn. (XXXVI). trans-Cyclonoene and trans-cyclodecene from cyclononyldimethylamine oxide and cyclodecyldimethylamine oxide.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1628-31.

1-05234 — CORWIN (A.H.) and DOAK (K.W.). **Kinetics of the condensation of dipyrrylmethenes with an x-free pyrrole.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 464-9.

1-05235 — COREY (E.J.) and SNEEN (R.A.). **Calculation of molecular geometry by vector analysis.** *J. Amer. Chem. Soc. Soc.* (1955), 77, No. 9, 2505-9.

1-05236 — COREY (E.J.) and YOUNG (R.L.). **A new steriod coupling product from cholesterol.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1672.

1-05237 — COWEN (F.M.). **The reactions of cyanogen chloride I. Addition to olefins.** *J. Org. Chem.* (1955), 20, No. 3, 287-94.

1-05238 — CRAM (D.J.) and CORDON (M.). **Macro rings, X. A new reaction for th conversion of acylions to ketones.** *J. Amer. Chem. Soc.* 1955), 77, No. 7, 1810-1.

1-05239 — CRISTOL (S.J.), BARACH (W.) and TIEMAN (C.H.). (C.H.). **Mechanisms of elimination reactions. XIII. 1,4-Conjugate eliminations. I. Some meso-dihydroanthracene derivatives.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 583-90.

1-05240 — CRISTOL (S.J.), FRANZUS (B.) and SHADAN (A.). **Alkaline and neutral hydrolysis of 2,octyl nitrate.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2512-5.

1-05241 — CROMWELL (N.H.) and HASSNER (A.). **B,7-Dihalopropy lamines, -I. l-Amino-2,3-dichloropropanes and 1,4-diamino-2,3-dichlorobutanes.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1568-72.

1-05242 — CUTLER (R.A.) and SURREY (A.R.). **The influence of steric effects, field effects and hydrogen bonding on thechemical reactivity of certain 4, 10-disubstituted-1,7-phenanthrolines.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2441-4.

1-05243 — CURTIN (D.Y.) and CREW (M.C.). **Rearrangement with nitrous acid of the diastereoisomeric l-p-anisyl-l-phenyl-2-amino-propanols. The cis effect of methyl and phenyl groups.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 354-7.

1-05244 — D'AMICO (J.J.) and HARMAN (M.W.). **Derivatives of ethyl 2-mercapto-^{4}-thiazoleacetate and rhodanine.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 476-8.

1-05245 — DANNLEY (R.L.), LUKIN (M.) and SHAPIRO (J.). **The reduction of urethans with lithium aluminum hydride.** *J. Org. Chem.* (1955), 20, No. 1, 92-4.

1-05246 — DANNLEY (R.L.) and ZAREMSKY (B.). **Free radical aromatic substitution. V. Reaction of benzoyl peroxide with alkylbenzenes.** *J. Amer. Chem. Soc.* (1955), 77, No. 1588-90.

1-05247 — DAUBEN (W.G.) and VAUGHAN)C.W.). **A study of the reaction of B-Glucose pentaacetate with phosphorus pentachloride.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1674-5.

1-05248 — DAUBEN (W.G.), TWEIT (R.C.) and MACLEAN (R.L.). **The configuration and reactivity of 9-substituted decalins.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 48-55.

1-05249 — DAUBEN W(G.) and HANCE (P.D.). **The structure of x-santonin.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 606-10.

1-05250 — DAUBEN W(G.) and HANCE (P.D.). **The structure of 1-keto-7-hydroxysantenic acie and its relationship to x-santonin.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 451-3.

1-05251 — DAVIS (R.E.), REAVILLE (E.T.), PENISTON (Q. P.) and McCARTHY (J.L.).**Lignin. IV. Electrophoresis sutdy of alkaline cleavage products from lignin sulfonates.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 405-9.

1-05252 — DAY (J.H.) and PIDWERBESKY (C.). **Fulvenes. II. Reactions with halogen.** *J. Org. Chem.* (1955), 0, No. 1, 89-90.

-05253 — DELEPINE (M.). **Sur le dimère de l'aldéhyde crotonique et ses dérivés.** *Ann. Chem.* (1955), 10, 5-34.

1-05254 — DENNIS (R.L.), PLANT (W.J.), SKINNER (C.G.), SUTHERLAND (G.L.) and SHIVE (W.). **Synthesis of -cyclopentence-1-glycine.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 36 -4.

1-05255 — DENNEY (D.B.). **An investigation of the hypothetical ion pair intermediate in the rearrangement of 9-decalyl hydroperoxide benzoate using oxygen-18.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1706-7.

1-05256 — DENIVELLE (L.) et FORT (R.). **Préparation et constitution des soi-disant "hypobromites d'Aryles", les bromocy-c lohexadiène-1.4 ones-3** *C. R Acad. Sci., Paris,* (1955), 240, No. 14, 1550-2.

1-05257 — DEORING (W.V.E.) and SCHREIBER (C.K.). **d-Orbital resonance. II. Comparative reactivity of vinyldimethylsulfonium and vinyltrimethylammonium lons.** *J. Amer. Chem. Soc.* (1955), 77, No. 3. 514-20.

1-05258 — DEORING (W.V.E.) and LEVY (L.K.). **d-Orbialt resonance I. The acidity of bridgehead x-hydrogeu in 'a bicycli trisulfone.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 509-13.

1-05259 — DERMER (O.C.) and EDMISON (M.T.). **Orientation in aromatic substitution by the benzenesulfonimido radical.** *J. Amer. Chem. Soc.* (1955), 77, No. 1. 70-3.

1-05260 — DE SURVILLE (B.). **Etude de la dimérisation de l'acide linoléique et de polycondensations à partir des acides dimères et de grouements difonctionnels.** *J. Rech.* (1955), No. 3, 169-93.

1-05261 — DETAR (D.F.) and TURETZKY (M.N.). **Mechanisms of diazonium salt reactions. I. Products of the reactions of benzené zenediazonium salts with methanol.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1745-50.

1-05262 — DHATT (M.S.) and NARANG (K.S.). **Thiazoloquinazoline derivatives III. Synthesis of alkyl and aryl derivatives.** *J. Org. Chem.* (1955), 20, No. 3, 302-5.

1-05263 — DICHER-MAN (S.C.) and MORICONI (E.J.). **The Schmidt reaction with 2,2,6-trimethyl-and 1,3-dimethyl-4-piperidones.** *J. Org. Chem.* (1955), 20, No. 2, 206-9.

1-05364 — DICKEY (J.B.), TOWNE (E.B.) and WRIGHT (G.F.). **Nitration of 2-aminothiazoles.** *J. Org. Chem.* (1955), 20, No. 4, 499-10.

1-05265 — DILLE (K.L.), SUTHERLAND (M.L.) and CHRISTENSEN (B.E.). **Purines V. The preparation of certain 2,9-substituted purines and azapurines.** *J. Org. Chem.* (1955), 20, No. 2, 171-7.

1-05266 — DJERASSI (C.), BEEREBOOM (J.J.), MARFEY (S.P.) and FIGDOR (S.K.). **Alkaloid studies V. Synthesis of 1-isopropyl and -1isobutyl -2-methyl-6,7-dimethoxy - 1,2,3,4-tetrahydroisoquinoline.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 484-5.

1-05267 — DJERASSI (C.), GORMAN (M.), MARKLEY (F. X.) and OLDENBORG (E.B.). **Studies in organic sulfer compounds. VII. Lithium aluminum hydride reduction of xanthates to mercapetans synthesis of substituted B-mercaptoethanois.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 568-71.

1-5268 — DJERASSI (C.) and LIPPMAN (A.E.). **Terpenoids. XIII. The structures of the cactus triterpenes machaeric acid and machaerinic acid.** *J. Amer. Chem. Sco.* (1955), 77, No. 7, 1825-8.

1-05269 — DREIDING (A.S.) and TOMASEWSKI (A.J.). **The stereochemistry of some derivatives of decalin with angular substituents.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 168-70.

1-05270 — DOERING (W.V.E.) and GOFFMANN (A.K.). **a-Orbital resonance. III. Deuterium exchange in methyl onium salts in bicyclo (2,2,1) heptane-2-sulfonium iodide.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 521-6.

1-05271 — DOLGOV (B.N.), BOLOTOV (B.A.) and KOMISSAROVA (L.A.). **In Russian.** (Investigation of the catalytic reactions of ethyl alcohol). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 71-80.

1-05272 — DOMNIN (N.A.) and MALYSHEVA (T.D.). **In Russian.** (Investigations in the field of unsaturated cyclic hydrocarbons and their halogen derivatives. XVII. The question of the structure of cyclo-octine). *J. Gen. Chem., Moscow,* (1955), 25-(87), No. 2, 329-30.

1-05273 — DOUGLASS (I.B.) and MARASCIA (F.J.). **Some reactions of methoxy-and ethoxydichloromethanesulfenyl chlorides.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1899-900.

1-05274 — DREIDING (A.S.) and TOMASEWSKI (A.J.). **A synthesis of** trans-**10-methyl-2-decalone.** *J. Amer. Soc.* (1955), 77, No. 2, 411-4.

1-05275 — DUBOIS (J-E.) et LUFT (R.). **Condensations mixtes de l'éthanal avec la méthyl-4 pentanone-2 et la diméthyl-4.4 pentanone-2.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 1540-2.

1-05276 — DUFRAISSE (CH.), ETIENNE (A.) et AUBRY (J.). **Photo-oxydation des cycles diéniques pentagonaux. Cas des polyarylcyclopentadiènes. Une réaction singulière de photolyse.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1170-4.

1-05277 — DUKE (F.R.) and FREELAND (M.Q.). **Acid-catalyzed condensation of tertiary alcohols with benzaldehyde.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1675-6.

1-05278 — DUPONT (G.), DULOU (R.) et PIGEROL (CH.). **Etude de quelques réactions de Kharasch sur l'heptène 1-Synthèse de l'octène-2-oïque et l'octanoïque.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 628-9.

1-05279 — EASTON (N.R.) and FISH (V.B.). **Decomposition of quaternary salts. III. Carbinols of the methadol type.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2547-9.

1-05280 — EASTON (N.R.) and FISH (V.B.). **The synthesis of 5-dimethylamino-4,4-diphenyl-2-pentanoi.** *J. Amer. Chem. Soc* (1955), 77, No. 7, 1776-8.

1-05281 — EDGERTON W(H.), MADDOX (V.H.) and CONTROULIS (J.). **The structure of chloramphenicol palmitate.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 27-9.

1-05282 — EIFERT (R.L.) and HAMILTON (C.S.). **Some methylphenanthrolines and corresponding aldehydes.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1818-9.

1-05283 — ELION (G.B.) and HITCHINGS (G.H.). **The synthesis of 6-thioguanine.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1676-

1-05284 — EMMONS (W.D.) and LUCAS (G.B.). **Peroxytri. fluoroacetic acid V. Oxidation of ketones to esters.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2287-8.

1-05285 — EMMONS (W.D.) and PAGANO (A.S.). **Peroxytrifluoroacetic acid. IV. The epoxidation of olefins.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 89-92.

1-05286 — ENDERS (G.F.) and OVERBERGER (C.G.). **Ionic polymerization. V. Molecular termination in the cationic polymerization of sytrene.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2201-5.

1-05287 — ENGLISH (W.D.) and SOMMER (L.J.). **Tetrakis-(trimethylsiloxy)-titane.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 170.

1-05288 — ENTEL (J.). **Nuclear structure of the water-soluble polycarboxylic acids from the oxidation of bituminous caol:the decarboxylation of reaction.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 611-5.

1-05289 — FREEDMAN (L.D.) and DOAK (G.O.). **The preparation of the isomeric ethylphenylphosphonic acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 173-4.

1-05290 — ERICKSON (J.G.) and KEPS (J.S.). **Reactions of long chain amines IV. Preparation of N-alkylpyrrolidines, N,N-dialkylpyrrolidinium chlorides and N,N-dialkylpiperidinium chlorides.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 485-6.

1-05291 — ETIENNE (A.) et LEPAGE (Y.). **Dihydroxy-1.4 anthracène et dérivés alcolylés correspondants. Leur photooxydation et leur photodimérisation.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1233-5.

1-05292 — ETIENNE-PETITFILS (J.). **La bétaine chez** Patella vulgata. *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 1028-30.

1-05293 — ETTLINGER (M.G.) and HODKINS (J.E.). **The mustard oil of rape seeed, allylcarbinyl isothiocyanate and synthetic isomers.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1831-6.

1-05294 — FADIA (M.P.), SHUKLA (V.P.) and TRIVEDI (J.J.). **m-Alkyl-phenols.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 113-6.

1-05295 — FADIA (M.P.), SHUKLA (V.P.) and TRIVEDI (J.J.). **Friedel and Craft's acylation of ethyl p-hydroxybenzoate.** *J. Indian, Chem. Soc.* (1955), 32, No. 117-9.

1-05296 — FAITH (H.E.), BAHLER (M.E.) and FLORESTANO (H.J.). **Disubstituted dichlorobenzophenones, isomeric dichlorobenzhydrols and related compounds.** *J. Amer. Chem. Soc.* (1955). 77, No. 3, 543-7.

1-05297 — FARBEROV (M.I.) and SPERANSKAYA (V.A.). **In Russian.** (Concentration of dilute solutions of formaldehyde under pressure). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 2, 222-6.

1-05298 — FATELEY (W.G.) and LIPPINCOTT (E.R.). **The vibrational spectrum and structure of the tropylium ion.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 249-50.

1-05299 — FIELD (L.) and SETTLAGE (P.H.). **Reaction of methanesulfonic anhydride with hydrogen halides.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 170-1.

1-05300 — FISCHER (R.F.) and WHETSTONE (R.R.) **Peptide derivatives containing trifunctional amino acids II.** *J. Amer. chem. Soc.* (1955), 77, No. 3, 750-1.

1-05301 — FOX (H.H.) and GIBAS (J.T.). **Synthetic tuberculostats. IX. Dialkyl derivatives of isonicotinylhydrazine.** *J. Org. Chem.* (1955), 20, No. 1, 60-9.

1-05302 — FREEMAN (J.P.) and LUCAS (G.B.). **Hydrolytic rearrangement of x-cyanoisopropyl mesitoate.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2334.

1-05303 — FREIDLIN (L.H.) and RUDNEVA (K.G.). **In Russian.** (The nickel catalyst for low temperature hydrogenation, prepared by the method of displacement). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 723-6.

1-05304 — FONKEN (G.S.), THOMPSON (J.L.) and LEVIN (R.H.). **Chemical studies with 11-oxygenated steroids. VII. The oxidation of 3-hydroxysteroids with t-butyl hypochlorite.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 172.

1-05305 — FOSTER (R.J.), SHINE (H.J.) and NIEMANN (C.). **(Reevaluation of the inhibition constants of previously investigated competitive inhibitors of x-chymotrypsin. I. Hydrolysis products and enantiomorphs of specific substrates.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2378-83.

1-05306 — FUGGER (J.), TIEN (J.M.) and HUNSBERGER (I.M.). **The preparation of substituted hydrazines. I. Alkylhydrazines via alkylsydnones.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1843-8.

1-05307 — FUKUSHIMA (D.D.) and GALLAGHER (T.F.). **Reduction of unsaturated steriods with deuterium. Distribution of isotope and mechanism.** *J. Amer. Soc.* (1955), 77, No. 1, 139-42.

1-05308 — FUSON (R.C.), EMMONS (W.D.) and SMITH (S.G.). **The condensation of t-butylmagnesium chloride with duryl o-isopropenyl-phenyl ketone.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2503-5.

1-05309 — FUSON (R.C.) and HEITMILLER (R.F.). **Condensation of 1,4-diarolybutanes with benzaldehyde.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 174-5.

1-05310 — GALANINA (R.S.) and NEKRASOV (A.S.). **In Russian.** (The activity of hydrogen atoms of different locations in the chlorination of n-alkanes C6-C9). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 701-3.

1-05311 — GARREAU (Y.). **Sur les propriétés du noyau benzénique dans le diméthylamino-2 méthyl-4 phényl-5 thiazol, et son produit de méthylation en position 3.** *C. R, Acad. Sci., Paris,* (1955), 240, No. 7, 787-9.

1-05312 — GARTON (V.A.) and WEISS (D.E.). **The quinone-hydroquinone character of activated carbon and carbon black.** *Aust. J. Chem.* (1955), 8, No. 1, 68-95.

1-05313 — GAULT (H.) et SELIM (M.). **Sur quelques composés nouveaux de la série du diphényléthane.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 630-1.

1-05314 — GAULT (F.) et WAHL (H.). **Colorante azoïques dérivés de la triméthyl-2,3,3-indolènine.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 983-4.

1-05315 — GAYLORD (N.G.). **Carbamates III. Reactions of "acetylene bis-carbamates".** *J. Org. Chem.* (1955), 20. No. 4, 546-8.

1-05316 — GEISSMAN (T.A.) and ARMEN (A.). **The rearrangement of 2-acetyl-and 2-benzoylcoumarone oxime p-toluenesulfonates.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1623-7.

1-05317 — GEORGE (P.D.) and LADD (J.R.). **t-Alkyl borates.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1900-1.

1-05318 — GEORGE (P.D.), SOMMER (L.H.) and WHITMORE (F.C.). **Redistribution of Et_4 Si and Pr4Si.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1677-8.

1-05319 — GEVER (G.). **4-Nitro-2-thenaldhyde.II.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 577-8.

1-05320 — GEVER (G.), O'KEEFE (C.), DRAKE (G.), EBETINO (F.), MICHELS (J.). and HAYES (K.). **Chemotherapeutic nitrofurans. I. Some derivatives of 3-amino-2-oxazolidone.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2277-81.

1-05321 — GHIRARDELLI (R.) and LUCAS (H.J.). **Stereochemistry of the ring opening of 2,3-iminobutane by acetic acid** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 106.

1-05322 — GHOSH (T.N.) and DUTTA (S.). **isoQuiniline derivatives. I.** *J. Indian, Chem. Soc.* (1955), 31, No. 1, 17-22.

1-05323 — GINSBURG (O.F.), IOFFE (D.V.) and MELNIKOVA (N.S.). **In Russian.** (Dyes with antipyrine nucleus. IV. Acid-base properties of the dyes). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 358-62.

1-05324 — GIMAN (H.) and INGHAM (R.K.). **Some tetraorganolilanes.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1680-1.

1-05325 — GLENNIE (D.E.), TECHLENBERG (H.), REAVILLE (E.) and McCARTHY (J.L.). **Lignin. V. Vanilloylformic acid from alkaline cleavage of lignin sulfonates.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2409-12.

1-05326 — GOLDBERG (E.P.) and NACE (H.R.). **Selective reduction of the unsaturated schiff base system C=C—C=N; A method for reducing the carbon double bond of a, p-unsaturated aldehydes.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 359-61.

1-05327 — GOLDBLATT (L.A.), YEADON (D.A.) and BROWN (M.). **The preparation and properties of p-dipalmitin.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2477-9.

1-05328 — GOLDFARB (Ya.L.) and FABRICHNY (B.P.). **In Russian.** (The synthesis of aminoacids of the aliphatic series from derivatives of thiophene). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 461-4.

1-05329 — GOWARD (G.W.) BRICKER (C.E.) and WILDMAN (W.C.). **A polarographic study of nitro-compounds.** *J. Org. Chem.* (1955), 20, No. 4, 378-86.

1-05330 — GRAGSON (J.T.), GREENLEE (K.W.), DERFER (J.M.) and BOORD (C.E.). **Cyclopropane hydrocarbons from gamma-bromoethers.** *J. Org. Chem.* (1955), 20, No. 3, 275-82.

1-05331 — GRAY (F.W.), GERECHT (J.F.) and KRMS (I.J.). **The preparation of model long chain alkylbenzenes and a study of their isomeric sulfonation products.** *J. Org. Chem.* (1955), 20, No. 4, 511-24.

1-05332 — GREBENYUK (A.D.) and TZUKERVANIK (I.P.). **In Russian.** (Nuclear cyanethyiation of aromatic compounds). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 286-93.

1-05333 — GREENSPAN (F.P.), GALL (R.J.) and MAC-KELLAR (D.G.). **Preparation and properties of perlauric acid.** *J. Org. Chem.* (1955), 20, No. 2, 215-7.

1-05334 — GROGAN (C.H.), RICE (L.M.) and REID (E.E.). **Dithiols and derivatives.** *J. Org. Chem.* (1955), 20, No. 1, 50-9.

1-05335 — GRUNDMANN (C.) and KOBER (E.). **An improved synthesis of protoanemonin.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2332-3.

1-05336 — GRUNDMANN (C.) and KREUTZBERGER (A.). **Triazines. XI. Some reactions of 1,3,5-traizine.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 44-8.

1-05337 — GUSS (C.O.) and ROSENTHAL (R.). **Bromohydrins from olefins and N-bromosuccinimide.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2549.

1-05338 — GUPTA (S.C.S.) and CHATTERJEE (D.N.). **Studies in catalytic dehydrogenation. VI.** *J. Indian, Chem. Soc.* (1955), 31, No. 1, 13-6.

1-05339 — GUTMANN (H.R.) and ALBRECHT (P.). **An improved synthesis of fluorene-1-carboxylic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 175-6.

1-05340 — GUTSCHE (C.D.) and JOHNSON (H.E.). **Ring enlargements. III. Ring enlargement of cyclohexanone with ethyl N-Nitrose-N-benzylcarbamates carrying methyl and methoxyl substituents on the phenyl nucleus.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 109-12.

1-05341 — HAIMOVA (M.A.). **In Russian.** (Addition of iodine chloride to asymmetric diphenylethylene 1,1-di-p-tolylpropene-1). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 387-91.

1-05342 — HAM (E.A.), HARMAN (R.E.), BRINK (N.G.) and SARETT (L.H.). **Studies on the chemistry of aldosterone.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1637-40.

1-05343 — HAMMOND (G.S.). **A correlation of reaction rates.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 334-8.

1-05344 — HAMMOND (G.S.) and GRUNDEMEIER (W.). **The mechanism of the benzidine rearrangement III.. The rearrangement of p,p' dideuterohydrazobenzene.** *J. Amer. Chem. Soc,* (1955), 77, No. 9, 2444-6.

1-05345 — HAMMOND (G.S.) and HOGLE (D.H.). **The dsisociation of sterically hindered acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 338-40.

1-05346 — HAMMOND (G.S.) and PARKS (L.R.). **The displacement of halogen from 1-X-2,4-dinitrobenzenes.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 340-3.

1-05347 — HANSEN (E.S.) and ZEISS (H.H.). **Chromic acid degradation of methyl dinitrodehydroabietate.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1643-7.

1-05348 — HARWELL (K.E.) and L.F.). cis-trans **Isomerization of 1-bromo-1-propene.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1682-4.

1-05349 — HATCH (L.F.) and MANGOLD (D.J.). **Preparation and properties of 3-chloro-1-iodo-1-propyne and 3-bromo-1-iodo-1-propyne.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 176-7.

1-05350 — HATCH (L.F.) and WEISS (H.D.). **Methylphenoxyacetylene and phenoxypropadiene.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1798-800.

1-05351 — HAUPTMANN (H.) and BERL (H.). **The synthesis of cystine-B,B-dicarboxylic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 704-7.

1-05352 — HAUPTSCHEIN (M.), SAGGIOMO (A.J.) and STOKES (C.S.). **Trifluoromethylaminosalicylic acids and related reactions.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2284-7.

1-05353 — HAWTHORNE (M.F.) and HAMMOND (G.S.). **The oxygenation of the tri-(p-nitrophenyl)-methide ion. A novel oxidation-reduction reaction.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2549-51.

1-05354 — HAWTHORNE (M.F.), HAMMOND (G.S.) and GRAYBILL (B.M.). **The nucleophilicity of the cyanide ion.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 486-8.

1-05355 — HAYES (K.). **Chemotherapeutic nitrofurans. III. N-(5-nitro-2-furfurylidene-3-aminotetrahydro-1,3-oxanine-2-one.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2333-4.

1-05356 — HAYES (K.), EBETINO (F.) and GEVER (G.). **Chemotherapeutic nitrofurans.-II. The formation of some reactions of derivatives of 3 amino-2-iminooxazolidine.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2282-3.

1-05357 — HAYES (F.N.), ROGERS (B.S.) and OTT (D.G.). **2,5-diaryl-oxazoles and 2,5-diaryl-1,3,4-oxadiazoles.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1850-2.

1-05358 — HAZARD (R.), CHABRIER (P.), CARAYON-GENTIL (A.) et FIEBET (Y.). **Contribution à l'étude des esters orthophosphoriques-halogénés(I).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 986-8.

1-05359 — HENNE (A.L.) and STEWART (J.J.). **Fluorinated amines.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1910-2.

1-05360 — HEILMANN (R.), DE GAUDEMARIS (G.) et ARNAUD (P.). **Sur la structure des produits de condensation de l-éthanal avec la pentanone-2 et la butanone-2.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 1542-4.

1-05361 — HENRY (R.A.), FINNEGAN (W.G.) and LIEBER (E.). **Kinetics of the isomerization of substituted 5-aminotetrazoles.-***J. Amer. Chem. Soc.* (1955), 77, No. 8, 2264-70.

1-05362 — HENZE (H.R.) and ALLEN (G.R.). **A study of the structure of some derivatives of 5-(o-nitrobenzylidene-) hydantoin.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 461-4.

1-05363 — HERZ (W.) and CLEARE (B.E.). **Azulenes VI. An instance of isopropyl group migration.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2318-20.

1-05364 — HEYL (F.W.) and HERR (M.E.). **9 (11)-Dehydrotestosterone and esters.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 488-9.

1-05365 — HEY (D.H.) and PALLUEL (A.L.). **A vindication of Spath and Hromatka's synthesis of apomorphine dimethyl ether.** *Chem. Ind.* (1955), No. 7, 40.

1-05366 — HENNE (A.L.) and POSTELNECK (W.). **Perfluorinated butadiene.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2334-5.

1-05367 — HIGGINS (W.A.), (VOGEL (P.W.) and CRAIG (W. G.). **Aromatic phosphinic acids and derivatives. I. Diphenylphosphinodithioic acid and its derivatives.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1864.

1-05368 — HILL (C.M.), -PRIGMORE (R.M.) and MOORE (G.J.). **Grignard reagents and unsaturated ethers. IV. The synthesis and reaction of several vinyl ethers with grignard reagents.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 352-4.

1-05369 — HINDIN (S.G.), MILLS (G.A.) and OBLAD (A.G.). **Reaction of C5-C8 paraffins with a silica-alumina cracking catalyste. II. Hydrogen exchange.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 538-42.

1-05370 — HINDIN (S.G.), OBLAD (A.G.) and MILLS (G.A.). **Reactions of C5-C8 paraffins with a silica-alumina cracking catalyst. I.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 535-8.

1-05371 — HINE (J.), BROWN-(J.A.), ZALKOW (L.H.), GARDENER (W.E.) and HINE (M.). **The synthesis of bicyclo (2,2,2,) -2,5-octadiene.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 594-8.

1-05372 — HINE (J.) and BRADER (W.H.). **The mechanism of the transformation of vicinal dihalides to olefins by reaction with iodide ion.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 361-4.

1-05373 — HIRAYAMA (K.). **Absorption spectra and chemical structure-1. conjugated polyenes and p-polyphenyls.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 373-9.

1-05374 — HIRAYAMA (K.). **Absorption spectra and chemical structure IV. Unsaturated aldehydes, ketones and carboxylic acids** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 383-5.

1-05375 — HOEY (G.B.), DEAN (D.O.) and LESTER (C.T.) **sym-tetraphenylacetone. III. The preparation of 2,2,4,4-tetraphenyloxetanone.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 391-3.

1-05376 — HORROM (B.W.), FREIFELDER (M.) and STONE (G.R.). **I-Formylpiperazine and related compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 753-4.

1-05377 — GORWITZ (L.). **cis-and trans-2-Styrylquinolinium compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1687-90.

1-05378 — HOOVER (J.R.E.) and DAY (A.R.). **Preparation of some 1-alkyl-1,2-dihydro -3-hydroxybenzo (g) quinoxaline -5,-10 diones.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 35-7.

1-05379 — HUMBER (W.F.). **Mono-x-aminoacyl and mono-x-dipeptide triglycerides.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 112-6.

1-05380 — HUEBNER (C.F.), LUCAS (R.), MACPHILLAMY (H.B.) and TROXELL (H.A.). **Rauwolfia alkaloids. XIV. Derivatives of yohimbé alkaloids.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 469-72.

1-05381 — HUEBNER (C.F.), MACPHILLAMY (H.B.), ANDRE (A.F.) and SCHLITTLER (E.). **Rauwolfia alkaloids. XV. The constitution of reserpic acid. Position of substituents in ring E.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 472-5.

1-05382 — HUNSBERGER (I.M.), OSUCH (C.), FETTER (N.) and TAUSSIG (P.). **The nitration of benzhydrol and diphenylbromoethane.** *J. Org. Chem.* (1955), 20, No. 1, 70-2.

1-05383 — HUNSBERGER (I.M.), LEDNICER (D.), GUTOWSKY (H.S.), BUNKER (D.L.) and TAUSSIG (P.). **The determination of double-bond character in cyclic systems. III. Indan and o-xylene.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2466-75.

1-05384 — KURD (C.D.) and JUEL (I.H.). **The reaction of aromatic nitro compounds with polynuclear hydrocarbons at elevated temperatures.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 601.6-

1-05385 — HURD (C.D.) and HAYAO (S.). **Reaction of propiolactone with heterocyclic amines.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 117-21.

1-05386 — IRIARTE (J.), ROSENKRANZ (G.) and SONDHEIMER (F.). **Steroids LXV. A synthesis of and rosterone.** *J. Org. Chem.* (1955), 20, No. 4, 542-5.

1-05387 — ISAEV (Yu.B.). **In Russian.** (The peculiarity of the behaviour of the nickel catalyst during the hydrogenation of furfuryl alcohol in the vapour phase). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1087-90.

1-05388 — IVANOV (Ch. P.) and PANAYOTOV (I.M.). **In Russian.** (Antituberculous compounds of the diphenyl series. Alkyl ethrs and the hydrazide of 4-aminodiphenyl-1-carbonic acid). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 465-8.

1-05389 — IZMAILOV (N.A.) and FRANKE (A.K.). **In Russian.** (Mutual solubility in triple liquid systems. I. The system water-isopropyl alcohol-dichloroethane). *J. Phys. Chem., Moscow.* (1955), 29, No. 1, 120-7.

1-05390 — JACOBSON (M.). **Constituents of Heliopsis species. IV. The total synthesis of** trans-**affinin.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2461-3.

1-05391 — JAEGER (R.), CADIOT (P.) et WILLEMART (A.). **Réaction rubrénique du chlorure de phénylparanitrophényl-(phényléthynyl)-méthyle.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1226-8.

1-05392 — JOHNSON (A.M.) and MARSHALL (H.B.). **The isolation and identification of vanillil in the oxidation products of sulfite waste liquor.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2335-6.

1-05393 — JOHNSON (D.A.). **The reaction of styrene oxide with sulfonamides.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2336-7.

1-05394 — JOHNSON (W.S.), BANNISTER (B.), PAPPO (R.) and PIKE (J.E.). **Total synthesis of testosterone.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 817-9.

1-05395 — JONES (R.G.) and AINSWORTH (C.). 1,2,4-**Triazole-3-al-anine.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1538-40.

1-05396 — JONES (R.W.), DIMLER (R.J.) and RIST (C.E.). **Kinetics of hydrolysis of isomaltotroise and isomaltotriitol.** *-J. Amer. Chem. Soc.* (1955), 77, No. 6, 1659-63.

1-05397 — JONES (R.N.), HERLING (F.) and KATZENELLENBOGEN (E.). **The infrared spectra of ketosteriods below** 1350° Cm-1. *-J. Amer. Chem. Soc.* (1955), 77, No. 3, 651-61.

1-05398 — KANTOR (S.W.), OSTHOFF (R.C.) and HURD (D.T.). **Methylvinylpolysiloxanes.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1685-7.

1-05399 — KARMAKAR (G.) and ZECHMEISTER (L.). **On the dehydrogenation products of x-carotene and cryptoxanthin.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 55-60.

1-05401 — KAZIMI (H.R.), TARBELL (D.S.) and PLANT (D.). **A study of the Schonberg rearrangement of diaryl thioncarbonates to diaryl thiolcarbonates.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2479-82.

1-05402 — KELOS (R.G.), GREENLEE (K.W.), DERFER (J.M.) and BOORD (C.E.). **The synthesis, purification and properties of some polyalkylcyclopropanes:reduction of a, r-dibromides.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1751-5.

1-05403 — KHROMOV-BORISOV (N.V.) and KOLESOVA (M. B.). **In Russian.** (Reaction of nitro-derivatives of benzene-sulphenamides with sarbonyl compounds). *J. Gen. Chem., Moscow,* (1955), 25, (87), No. 2, 380-7.

1-05404 — KING (L.C.) and OZOG (F.J.). **Reactions of pyrylium and pyridinium salts with amines.** *J. Org. Chem.* (1955), 20, No. 4, 448-54.

1-05405 — KING (J.A.), MELTZER (R.I.) and DOCZI (J.). **The synthesis of some fluorene derivatives.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2217-23.

1-05406 — KISSMAN (H.M.) PIDACKS (C.) and BAKER (B.R.). **Puromycin. Synthetic studies. XI. D-Ribofuranosyl derivatives of 6-dimethylaminopurine.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 18-24.

1-05407 — KLEINSPEHN (G.G.). **A novel rout to certain 2-pyrrolecarboxylic esters and nitriles.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1546-8.

1-05408 — KLEMM (L.H.) SPRAGUE (J.W.) and ZIFFER (H.). **Chemical reactivities of arylcycloalkenes. VI. Molecular compounds of trinitrofluorenone with some substituted naphthalenes. II.** *J. Org. Chem.* (1955), 20, No. 2, 200-205.

1-05409 — KLEMM (L.H.) and ZIFFER (H.). **Some vicinal disubstituted cyclopentenes and cyclohexenes bearing naphthyl and methyl groups.** *J. Org. Chem.* (1955), 20, No. 2, 182-9.

1-05410 — KLEMM (L.H.), ZIFFER (H.), SPRAGUE (J.W.) and HODES (W.). **Ultraviolet absorption spectra of some vinylnaphthalenes and related aromatic hydrocarbons.** *J. Org. Chem.* (1955), 20, No. 2, 190-9.

1-05411 — KLOHS (M.W.), DRAPER (M.D.) and KELLER (F.). **Alkaloids of** Rauwolfia serpentina **Benth. V. Rescinnamine.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2241-3.

1-05412 — KOCH (W.T.) and WOLF (F.J.). **Purification of corticotropin.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 489-9·0

1-05413 — KOIZUMI (M.), WATANABE (A.) and KURODA (Z.). **Dye-sensitized photopolymerization of styrene.** *Nature, London,* -(1955), 175, No. 4461, 770-1.

1-05414 — KOLLOITSNCH (F.), HAJOS (A.) and GABOR (V.). **Racemization of L/g-(+)threo-2-amino-l-p-nitro-phenylpropane-I:3-diol.** *Chem. Ind.* (1955), No. 7, -38-9.

1-05415 — KORSHUNOV (I.A.), VERTYULINA (L.N.) and MALYGINA (N.I.). **In Russian.** (Reduction of m-nitrobenzene sulphonic acid on the mercury drop cathode). *J. Gen. Chem., Moscow,* (1955), 25, (87), No. 2, 261-5.

1-05416 — KORSHUN (M.O.) and TERENTIEVA (E.A.). **In Russian.** (Rapid methods of micro-elementary analysis. The simultaneous determination of phosphorus, sulphur, carbon and hydrogen in organic compounds containing C,H,O,N,S,P). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 707-9.

1-05417 — KORNEV (K.A.). **In Russian.** (Investigation of the chemistry of the reaction of chlorination of phenetole with N,N-dichlorobenzenesulphonamide in dichloroethane). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1091-3.

1-05418 — KOSOLAPOFF (G.M.) and DUNCAN (J.J.). **The reaction of m-and p-phenylene-bis-diazonium fluoborates with phosphorus trichloride.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2419-20.

1-05419 — KOZLOV (V.). and BELOV (B.I.). **In Russian.** (Investigations in the anthraquinone series. XXI. The hydrolyssi of x-anthraquinonyl-mercury). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 410-6.

1-05420 — KRICHEVSKY (I.R.), KHAZANOVA (N.E.) and LINSCHITZ (L.P.). **In Russian.** (Critical effects in the system triethanolamine-water). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 737-40.

1-05421 — KRUG (R.C.) and TOCKER (S.). **The reduction of organic compounds of sulfur by metals in liquid ammonia** *J.. Org. Chem.* (1955), 20, No. 1, 1-8.

1-05422 — KUEHL (F.A.), SHUNK -(C.H.) and FOLKERS (K.). **Vitamin B12 XXIV. DL-3,3-Dimethyl!-2,5-dioxo-4-hydroxypyrrolidine-4-propionic acid lactone and DL-3,3-dimethyl-2,5-dioxopyrrolidine-4-propionic acid new degradation products.** *J. Amer. Chem. Soc.* (1955), 77, No. 1. 251-2.

1-05423 — KULKARNI (V.G.) and JADHAV (G.V.). **Chalkones. III. Preparation of chalkones from 2-hydroxy-4-methoxy-5-nitro-acetophenone (5-nitropeanol), their bromination and study of the reactivity of chalkone dibromides.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 97-101.

1-05424 — KUMAMOTO (J.) and WESTHEIMER (F.H.). **The hydrolysis of mono- and dibenzyl phosphates.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2515-8.

1-05425 — KUPCHAN (S.M.), DELIWALA (C.V.) and ZONIS (R.D.). Zygadenus **alkaloids VI. Active principles of Zygadenus paniculutus.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 755,-

1-05426 — KUPCHAN (S.M.), LAVIE (D.) and ZONIS (R.D.). Zygadenus **alkaloids. V. Active principles of** Zygadenus venenosus **Zygacine.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 689-91.

1-05427 — KUPCHAN (S.M.). **Schoenocaulon alkaloids. IV. The isomeric cevagenine orthoacetates.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 686-9.

1-05428 — KUPCHAN (S.M.) and LAVIE (D.). **Schoenocaulon alkaloids. III. The bismuth oxide oxidation of veracevine, cevagenine and cevine.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 683-6.

1-05429 — KURZER (F.), LAWSON (A.) and POWELL (J.R.). **Synthesis of trisulfanilylmelamine.** *J. Org. Chem.* (1955), 20, No. 2, 232-6.

1-05430 — KURTH (E.F.) HERGERT (H.L.) and ROSS (J.D.). **Behavior of certain 3-hydroxyflavanones toward bases and basic salts of the alkali metals and ammonia.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1621-2.

1-05431 — LAHEY (F.N.) and WLUKA (D.J.). **Geijerin: a new coumarin from the bark of** Geijera salicifolia **Schott.** *Aust. J. Chem.* (1955), 8, No. 1, 125-8.

1-05432 — LAL (J.) and GREEN (R.). **The preparation of the cyclopentyl-esters of acrylic methacrylic and crotonic acids.** *J. Org. Chem.* (1955), 20, No. 4, 397-99.

1-05433 — LAPKIN (I.I.) and LAPKINA (O.M.). **In Russian.** (Reactions of halogen metallic alcoholates. I. Reactions of halogen magnesium alcoholates of diaryl-carbinols with esters). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2,-298-304.

1-05434 — LAUER (W.M.) and DAY (J.T.). **Deuterium-hydrogen exchange in the** para **position of phenyl alkyl ethers.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1904-5.

1-05435 — LECHER (H.Z.) and HARDY (E.M.). **Some new methods for preparing Bunte salts.** *J. Org. Chem.* (1955), 20, No. 4, 475-87.

1-05436 — LEFFLER (J.E.) and BARBBATO (L.M.). **Reductive decomposition of an azo compound.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1690-1.

1-05437 — LE MOAL (H.) et FOUCAUD (A.). **Sur la condensation de la désoxybenzoine et du cyanacétate d'éthyle.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 1548-50.

1-05438 — LEONARD (N.J.), THOMAS (P.D.) and GASH (V.W.). **Unsaturated amines. IV. Structures and reactions of the dehydrosparteines.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1552-8.

1-05439 — LEONARD (G.W.), LIPPINCOTT-(E.R.), NELSON (R.D.) and SELLERS (D.). **The tetramminesodium ion.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2029.

1-05440 — LEONARD (N.J.), HAY (A.S.), FULMER (R.W.) and GASH (V.W.). **Unsaturated amines. III. Introduction of x,B-unsaturation by means of mercuric acetate. Δ 1(10)- dehydroquinolizidine.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 439-44.

1-05441 — LEONARD (N.J.) and LOCKE (D.M.). **r-Pyridones by isomerization. Substituted 1-methyl-3,5-dibenzyl-4-pyridones.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1852-5.

1-05442 — LEONARD (N.J.) and LOCKE (D.M.). **Unsaturated amines.-II. Determination of the proximity of nitrogen to a double bond by ultraviolet absorption spectra.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 437-9.

1-05443 — LESHER (G.Y.) and SURREY (A.R.). **A new method for the preparation of 3-substituted-2- oxazolidones.** *J. Amer. Chem Soc.* (1955), 77, No. 3, 636-41.

1-05444 — LETSINGER (R.L.) and SKOOG (I.). **Organoboron compounds. IV. Aminoethyl diarylborinates.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2491-4.

1-05445 — LETSINGER (R.L.) and REMES (N.). **Organoboron compounds. V. The preparation of an unsymmetrical diarylborinate.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2489-91.

1-05446 — LIANG (H.T.) and BARTLETT (P.D.). **B-Propiolactone XVI. Reaction rates with anilines and** para- **substituted anilines.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 530-2.

1-05447 — LIBERMANN (E.) et ROUAIX (A.). **Sur les hydrazino-pyrimidines.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 984-6.

1-05448 — LICHTIN (N.N.) and M.H.). **The oxidation of glucose by chlorine in acid aqueous solution.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1875-80.

1-05449 — LI (S.O.) and EAKIN (R.E.). **Synthesis of N-phosphorylated derivatives amino acids.** *J. Amer. Chem. Soc.*(1955), 77, No. 7, 1866-70.

1-05450 — LIPATOVA (T.E.), GANTMACHER (A.R.) and MEDVEDEV (S.S.). **In Russian.** (The simultaneous catalytic polymerization of unsaturated compounds. The simultaneous polymerization of the systems isoprene-styrene and isoprene x-methylstyrene). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 925-8.

1-05451 — LOGAN (A.V.), MARVELL (E.N.) and ODELL (N.R.). **Attempted preparation of 1-phenyl-2-methyl-3-bromohexane by brominative decarboxylation.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2337-8.

1-05452 — LUTZ (R.E.), BAUER (C.R.), LUTZ (R.G.) and GILLESPIE (J.S.). **Hydride reductions so the cis and** trans**-dibenzoylstilbenes.** *J. Org. Chem.* (1955), 20, No. 2, 218-24.

1-05453 — LUGOVKIN (B.P.). **In Russian.** (Synthesis of secondary 6-quinolyl-carbinols) *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 392-7.

1-05454 — LUTZ (R.E.) and WEISS (J.O.). **Effect of configuration on the reactivity of the chalcone system.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1814-8.

1-05455 — LUTZ (R.E.) and RINKER (E.H.). **The action of lithium aluminum hydride and phenyllithium on phenylated chalcones.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 366-9.

1-05456 — LUNDE (K.) and ZECHMEISTER (L.). **Infrared spectrum and** cis**trans configurations of some carotenoid pigments.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1647-53.

1-05457 — LYNN (J.W.). **n-Acrylylmorpholine.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 754.

1-05458 — MACKENZIE (S.). **The racemization of usnic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2214-6.

1-05459 — MAcKENZIZ (C.A.) and CHUCHANI (G.). **Tritylation of aromatic compounds.** *J. Org. Chem.* (1955), 20, No. 3, 336-45.

1-05460 — MAGERLEIN (B.J.) and LEVIN (R.H.). **Chemical studies with 11-oxygenated steroids. V. 3α-20β-Bihydroxypregnan-11- one 11-ethylene ketal.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1904.

1-05461 — MALINOVSKY (M.S.) and EREMITSKAYA (E. D.). **In Russian.** (The use of paraldehyde in Grignard reactions). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 293-98.

1-05462 — MALTZEV (A.N.) and KOBOZEV (N.I.). **In Russian.** (Study of the active centers of hydrogenation in the ethylenic hydrocarbons. I.). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 142-58.

1-05463 — MARVELL (E.N.) and MAGOON (E.). **The dienone-phenol rearrangement. III. Rearrangement of** 6,6-**dimethyl-2,4-cyclohexadienone.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2542-3.

1-05464 — MARTIN (R.J.L.). **Mechanism of the acid hydrolysis of glycylglycine.** *Nature, London,* (1955), 175, No. 4461, 771.

1-05465 — MARVEL (C.S.), POTTS (R.M.) and KING (C.). **The copolymer of allyl alcohol and** 1,3-**butadiene.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 177-8.

1-05466 — MARVEL (C.S.) and RYDER (E.E.). **An attempted synthesis of** 3,4-**dimethylenethiophane.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 66-8.

1-05467 — MASLOV (P.G.). **In Russian.** (Graphical method of calculation of the heat capacity of organic compounds). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 3, 330-3.

1-05468 — MASUMURA (M.) and OKUMURA (F.S.). **Identity of hibalactone and savinin.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1906.

1-05469 — MASON (H.S.). **Reactions between quinones and proteins.** *Nature, London,* (1955), 175, No. 4461, 771-2.

1-05470 — MAUZERALL (D.) and WESTHEIMER (F.H.). **1-Benzyldihydronicotinamide- A model for reduced DPN.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2261-4.

1-05471 — MAY (E.L.) and MURPHY (J.G.). **Structures related to morphine. III. Synthesis of an analog of N-methylmorphinan.** *J. Org. Chem.* (1955), 20, No. 2, 257-63.

1-05472 — McBEE (E.T.) and CHRISTMAN (D.L.). **Infrared spectra of halogenated acetic esters.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 755-6.

1-05473 — McBEE (E.T.), DIVELEY (W.R.) and BURCH (J. E.). **The Diels-Alder reaction with** 5,5-**dimethoxy-1,2,3,4-tetrachlorocyclopentadiene.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 385-7.

1-05474 — McBEE (E.T.) and DIVELEY (W.R.). **Some reactions with chlorendic anhydride.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 493-4.

1-05475 — McBEE (E.T.), MEYERS (R.K.) and BARANAUCKAS (C.F.). **1,2,3,4-Tetrachlorocyclopentadiene. I. The preparation of the diene and its reaction with aromatic aldehydes and dienophiles.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 86-8.

1-05476 — McBEE (E.T.) and MEYERS (R.K.). **1,2,3,4-tetrachlorocyclopentadiene. II. The action of sulfuric acid on the diene.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 88-9.

1-05477 — McBEE (E.T.), PIERCE (O.R.) and MEYER (D.D.). **A mechanism study of the reducing action of Grignard reagents on fluorinated carbonyl compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 83-6.

1-05478 — McBEE (E.T.), PIERCE (O.R.) and CHRISTMAN (D.L.). **The Reformatsky reaction with ethyl bromofluoroacetate.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1581-3.

1-05479 — McBEE (E.T.), SMITH (D.K.) and UNGNADE (H.E.). **The absorption spectra of halogenated cyclopentenones.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 559-61.

1-05480 — McBEE (E.T.) and SMITH (D.K.). **The reduction of hexachlorocyclopentadiene.** 1,2,3,4,5-pentachlorocyclopentadiene., *J. Amer. Chem. Soc.* (1955), 77, No. 2, 389-91.

1-05481 — McBEE (E.T.), SMITH (D.K.) and UNGNADE (H. E.). **The synthesis and reactions of 5,5-difluorotetrachlorocyclopentadiene.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 387-9.

1-05482 — McCASLAND (G.E.) and REEVES (J.M.). **Cyclitols. VIII. Bromination of epi-inositol. Synthesis of conduritol-C.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1812-4.

1-05483 — McCAULAY (D.A.) and LEIN (A.P.). **Effect of acid strength on alkylation of arenes with olefins. I. m-Xylene with ethylene.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1803-4.

1-05484 — McELVAIN (S.M.) and EISENBRAUN (E.J.). **The constituents of the volatile oil of catnip. III. The structure of nepetalic acid.**-*J. Amer. Chem. Soc.* (1955), 77, No. 6, 1599-605.

1-05485 — McELVAIN (S.M.) and PARKER (P.H.). **Piperidine derivatives. XXVI. 1-Methyl-3-benzal-4-piperidone dimer.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 492-3.

1-05486 — McGUCKIN (W.F.) and MASON (H.L.). **Adrenal hormone analogs: 16a, 17a,-epoxy-11-dehydrocorticosterone acetate and a16-11-dehydrocorticosterone acetate.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1822-4.

1-05487 — Mc-LAMORE (W.M.), PAN (S.Y) and BAVLEY (A.). **Hypnotics and anticonvulsants. II. Halogenated tertiary acetylenic carbinols.** *J. Org. Chem.* (1955), 20, No. 1, 109-17.

1-05488 — McNEELY (K.H.) and WRIGHT (G.F.). **The methoxymercuration of 1,3-butadiene.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2553-4.

1-05489 — MEEN (R.H.) and GILMAN (H.). **Preparation and cleavage of some organosilanes containing heterocyclic groups.** *J. Org. Chem.* (1955), 20, No. 1, 73-81.

1-05490 — MEHLTETTER (C.L.) and MELLIES (R.L.). **The polyesterfication of 2,4,3,5,-Di-O-methylene-D-gluconic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 427-8.

1-05491 — MEINAWALD (J.). **The acid-catalyzed rearrangement cinenic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1617-20.

1-05492 — MERROW (R.T.) and DOLAH (R.W.V.). **Reactions of nitrate esters III. Evidence for nitrogen oxygen cleavage in reductions with hydrazine and alkaline hydrousulfides.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 756-7.

1-05493 — MEWADA (G.S.), PATEL (S.R.) and SHAH (N.M.). **Synthesis of 2:8dimethyl-3- substituted quinazol-4-ones.** *J. Indian, Chem. Soc.* (1955), 32, No. 3, 199-200.

1-05494 — MIKHAILOV (G.I.). **In Russian.** (Preparation of x,x-dipyridyl and x-bromopyridine). *Zh. Prikl. Khim., Leningr.* (1955), 28, No. 1, 114-5.

1-04595 — MILLER (J.). **The SN mechanism in aromatic ompounds. XII.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 180-1.

1-05496 — MILLER (C.S.), **Synthesis of 5-hydroxymethylcytosine.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 752-3.

1-05497 — MILAS (N.A.), DAVIS (P.) and NOLAN (J.T.). **Organic peroxides. XX. Peroxides from the ozonization of olefin in the presence of carbonium ions.** *J. Amer. Chem. Soc.* (1955s, 77, No. 9, 2536-41.

1-05498 — MILLER (S.L.). **Production of some organic compounds under possible primitive earth conditions.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2351-61.

1-05499 — MILAS (N.A.), DAVIS (P.) and CHIANG (L.). **Salts of the phosphoric ester of vitamin D3.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1640-3.

1-05500 — MISLOW (K.) and HAMERMESH (C.L.). **Effect of ring formation on optical rotary power. A comparison of the optical rotations of 2-phenylcyclopentanone and of some acyclic a-phenyl ketones.**-*J. Amer. Chem. Soc.* (1955), 77, No. 6, 1590-4.

1-05501 — MISRA (G.S.) and SRIVASTAVA (S.B.). **Note on the crossed Cannizzaro reaction.** *J. Indian, Chem. Soc.* (1955), 32, No. 3, 201-2.

1-05502 — MOCHEL (W.E.), CRANDALL (J.L.) and PETERSON (J.H.). **Photoinitiated diradical polymerization of methyl methacrylate.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 494-5.

1-05503 — MOLD (J.D.), GORE (R.C.), LYNCH (J.M.) and SCHANTZ (E.J.). **Creatine ethyl ether.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 178-80.

1-05504 — MORTON (A.A.), CLAFF (C.E.) and COLLINS (F.W.). **Condensation by sodium XXXVIII. The metalation of tert-butylbenzene by amylsodium and the effects of associated salts.**-*J. Org. Chem.* (1955), 20, No. 4, 428-39.

1-05505 — MORRIS (H.H.) and LAWRENDE (C.J.). **Ketone formation by the decarboxylation of a-n-decyl substituted glycidic acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1692-3.

1-05506 — MORRISON (D.C.). **The reaction of sulfenyl chlorides with trialkyl phosphites.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 181-2.

1-05507 — MOSHER (H.S.), and LOOK (M.). **Heterocyclic basic compounds. XVI. 4-chloropicolinic acid and some of its derivatives.** *J. Org. Chem.* (1955), 20, No. 3, 283-6.

1-05508 — MOWERY (D.F.). **Chromatographic adsorption. IV. Cation exchange resins as catalysts in glycoside formation.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1667-9.

1-05509 — MUELLER (G.P.) and NORTON (L.L.). **Ring-D reactions of 3β-acetoxy 5α-pregn-16-ene-12,20-dione.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 143-5.

1-05510 — MUKHERJEE (S.) and SRIVASTAVA (H.C.). **The structure of neem gum.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 422-3.

1-05511 — MULL (R.P.). **Thinonocarbanilates with anthelmintic activity.**-*J. Amer. Chem. Soc.* (1955), 77, No. 3, 581-3.

1-05512 — MURR (B.L.) and LESTER (C.T.). **Preparation of long chain alkylamin hydrochlorides.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1684-5.

1-05513 — MUR (V.I.). **In Russian.** (Internal complex salts of azo-compounds. II. Reaction of copper salts with some o-monoamino-azo-compounds). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 374-80.

1-05514 — MUSTAFA (A.), ASKER (W.), KAMEL (M.), SHALABY (A.F.A.) and HASSAN (A.-A.). **Action of Grignard reagents. VII. Benzoxazones, benzoxaz-2,4-diones and 2,3-diphenylquinazolone-4.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1612-5.

1-05515 — MUSTAFA (A.) and KAMEL (M.). **4-Styrylcoumarins and 2,3-dimethylquinoxaline in diene syntheses.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1828-30.

1-05516 — NAGANO (T.). **Triphenylethlene derivatives. I.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1691-2.

1-05517 — NATH (B.). **A study of infra-red spectra of aconitine, delphinine and their alkamines.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 75-8.

1-05518 — NATTA (G.), PINO (P.), CORRADINI (P.), DANUSSO (F.), MANTICA (E.), MAZZANTI (G.) and MORAGLIO (G.). **Crystalline high polymers of x-olefins.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1708-10.

1-05519 — NAVES (Y.). **Stéréoisomérie cyclohexénique: existence de deux dihydro 2-2-trans(2-6)-méthyl-2 a-irones.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1781-3.

1-05520 — NAZAROV (I.N.), KUZNETZOV (N.V.) and KUZNETZOVA (A.I.). **In Russian.** (The dimerization of trans-piperilene). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 320-9.

1-05521 — NAZAROV (I.N.), KUZNETZOVA (A.I.) and KUZNETZOV (N.V.). **In Russian.** (The dimerization of isoprene). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 307-20.

1-05522 — NEELY (T.A.) and CAPPS (J.D.). **Some derivatives of 8-chloro-6-methylquinoline.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 182-4.

1-05523 — NELSON (B.A.), MINSEK (R.C.), SIMON (J.I.) and UNDERWOOD (D.L.). **Preparation and derivatives of cyano-1,4-dioxane.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1695-6.

1-05524 — NELSON (S.J.), FISH (V.B.) and EASTON (N.R.). **Decomposition of quaternary ammonium salts. IV. Methyl ketones.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1908.

1-05525 — NEWKIRK (A.E.) and HURD (D.T.). **The direct synthesis of boron hydrides.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 241-2.

1-05526 — NOGAIDELI (A.I.) and DZAGNIDZE (K.Ya). **In Russian.** (Synthesis and hydrogenation of 2,4,7,9-tetramethyldecine-5-tetra-ol-2,4,7,9). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 304-6.

1-05527 — HOLAND (W.E,) **The nef reaction.** *Chem. Revs.* (1955), 55, No. 1, 137-55.

1-05528 — NOLAND (W.E.), CHRISTENSEN (G.M.), SAUER (G.L.) and DUTTON (G.G.S.). **The reaction of nitroolefins with indole.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 456-7.

1-05529 — NOLLER (C.R.) and PANNELL (C.E.). **The synthesis of DL-cis-3,5-cis-3',5'-tetramethyl - 1,1' -spirobipiperidinium bromide.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1862-3.

1-05530 — NORMAND (H.). **Recherches sur les magnésiens vinyliques. V. Synthèse du linalol et des ses homologues.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 631-3.

1-05531 — NUNN (J.R.) and HOLDT (M.M.). **Galactosyl glycerol from** Gelidium pristoides **and** Gracilaria confervoides. *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2551-2.

1-05532 — NYSTROM (R.F.). **Reduction of organic compounds by mixed hydrides. I. Nitriles.** *J. Amer. Chem. Soc.* (1955), 77, No. 2544-5.

1-05533 — O'CONNOR (G.L.) and NACE (H.R.). **The boric acid dehydration of alcohols.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1587-81.

1-05534 — OLIVERIO (V.T.) and SAWICKI (E.). **Some fluorine derivatives of urethan.** *J. Org. Chem.* (1955), 20, No. 4, 363-6.

1-05535 — OLIVETO (E.P.), SMITH (H.Q.). GEROLD (C.), WEBER (L.), RAUSSER (R.) and HERSHBERG (E.B.). **11-Oxygenated steroids. XI. 17 x-hydroxycorticosterone 21-acetate rom pregnane-11B-,-17x-diol-3,20-dione.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2224-7.

1-05536 — OSBAHR (A.J.), VAITIEKUNAS (A.) and NORD (F.F.). **Studies on the chemistry of heterocyckics. XXVII. a, B-Acetylenic acids and their esters in the thiophene series.** *J. Amer Chem. Soc.* (1955), 77, No. 7, 1911-2.

1-05537 — OSIPOV (O.A.), LYSENKO (Yu.A.) and AKOPOV (E.K.). **Iy Russian.** (Physico-chemical investigation of the reaction of titanium tetrachloride with esters of monobasic acids. V. The reaction of titanium tetrachlorid with n-propyl acetate and n-butyl acetate). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 249-55.

1-05538 — OTT (D.G.) and SMITH (G.G.). **A carbon-14 tracer study of the alkaline rearrangement of chlorophenanthraquinones.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2325-9.

1-05539 — OVERBERGER (C.G.) and TANNER (D.). **Ionic polymerization. A convenient synthesis of x-and B-alkylstyrenes. The effect of an x-alkyl group on the ultraviolet absorption spectra.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 369-73.

1-05540 — PAL (P.R.). **Analogues of pteroylglutamic acid. I. Replacement of p-aminobenzoic acid by p-aminosalicylic acid.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 89-91.

1-05541 — PANCHENKOV (G.M.), MOISEEV (V.M.) and LEBEDEV (Yu.A.). **In Russian.** (The decomposition of aryl diazonium fluoroborates as a method of preparation of pure boron fluoride). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 6, 1103-6.

1-05542 — PARIKH (J.R.) and BURGER (A.). **Analogs of nuccleotides. I. Theophyllinylalkylphosphonic acids and related compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2386-8.

1-05543 — PARIAUD (J-Ch.), MODIANO (J.) SOREL (R.) (R.) et STEFANI (R.). **Réduction polarographique de la diméthyl-I.I cyclohexanedione-3,5.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1217-8.

1-05544 — PARHAM (W.E.) and TRAYNELIS (V.J.). **Heterocyclic vinylethers. VII. Rearrangements of the 14-dithiadiene ring system.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 68-70.

1-05545 — PATEL (S.R.) and NARGUND (K.S.). **Studies in acridine series.** *J. Indian, Chem. Soc.* (1955), 32, No. 3, 187-90.

1-05546 — PATINKIN (S.H.), HORWITZ (J.P.) and LIEBER (E.). **The structure of tetracene.** *J. Amer. Chem. Soc.* (1955), 77, No. 3. 562-7.

1-05547 — PAUSON (P.L.). **Tropones and tropolones.** *Chem. Revs.* (1955), 55, No. 1, 9, 136.

1-05548 — PAUL (R.) et TCHELITCHEFF (S.). **Sur les dérivés sodés des diènes-1.4:Cas du cyclohexadiène-1.4 et du dihydro-1.4 naphtalène.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1222-3.

1-05549 — PEARSON (R.G.), ANDRSON (D.H.) and ALT (L.L.). **Mechanism of the hydrolytic cleavage of carbon carbon bonds III. Hydrolysis of x-nitro and x-sulfonyl ketones.** *J, Amer. Chem. Soc.* (1955), 77. No. 3, 527-9.

1-05550 — PEARSON (D.E.) and COLE (W.E.). **The Beckmann rearrangement. V. The rearrangement rates of some ortho-substituted acetophenone oximes.** *J. Org. Chem.* (1955), 20, No. 4, 488-93.

1-05551 — PEARL (I.A.). **Reactions of vanillin and its derived compounds XXIV. Some ethers of vanillin and vanillic acid.** *J. Amer Chem. Soc.* (1955), 77, No. 3, 757-8.

1-05552 — PEARSON (D.E.) and WAITS (E.D.3 **The Beckmann rearrangement VI. The ultraviolet absorption spectra of some aromatic oximes.** *J. Org. Chem.* (1955), 20, No.4), 494-8.

1-05553 — PENNINO (C.J.). **Reactions of 2,3,4,5,5,6,6-octachlorocyclohexen -2-one -I with sodium hydroxide and sodium acetate.** *J. Org. Chem.* (1955), 20, No. 4, 530-5.

1-05554 — PETERSEN (Q.R.). **Cyanide ion as a catalyst for transesterification. Non-aqueous buffering.** *J. Amer. Chem. Soc. Soc.* (1955), 77, No. 7, 1743-5.

1-05555 — PETROV (A.D.), CHERNYSHEV (E.A.) and KULISH (I.A.). **In Russian.** (Freidel-Crafts acetylation of trimethylbenzylsilane). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5. 929-32.

1-05556 — PETERSEN (Q.R.) and CHEN (C.T.). **Pseudocholesterol. I. Preparation and configuration.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2557-9.

1-05557 — PETROV (A.D.), SADYKH ZADE(S.I.) and VDOVIN (V.M.). **In Russian.** (Synthesis and reactions of B-trichlorosilylpropionitrile). *C. R. Acad. Sci. U.R.S.S.*(1955), 100, No. 4, 711-4.

1-05558 — PETROV (A.D.). PONOMARENKO (V.A.), MKHITARYAN (L.L.) and SNEGOVA (A.D.). **In Russian.** (Synthesis and properties of mono-chloro derivatives of ethylsilane chlorides). *C. R. Acad. Sci. U.R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1107-10.

1-05559 — PETROV (K.D.) and LAGUCHEVA (E.S.). **In Russian.** (The reaction of tetramethylbutene-diol with ethylene oxide). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 111-4.

1-05560 — PFISTER (K.) LEANZA (W.J.), CONBERE (J.P.), BECKER (H.J.), MATZUK (A.R.) and ROGERS (E.F.). **x-Methyl- - amino acids I. Homologs of glutamic acid methionine and diaminopinmelic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 697-700.

1-05561 — PHILLIPS (A.P.). **Some N,N'-bis-tertiaryaminoacetyl-x, w-polymethylene diamines and their quaternary ammonium salts as curare substitutes. V.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2400-2.

1-05562 — PHILLIPS (A.P.). **Synthetic hypotensive agents. II. Some hexamethylene-1,6-bis-t-amines and bisquaternary salts as gangloinic blocking agents.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1693-5.

1-05563 — PHILLIPS (M.) and BACOT (A.M.). **The isolation of i-inositol from American flue-cured tobacco.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 496.

1-05564 — PIGULEVSKY (G.V.) and KOJINA (I.S.). **In Russian.** (Investigation of the hydrocarbon isolimonene). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 416-22.

1-05565 — PINES (H.), VESELY (J.A.) and IPATIEFF (V.N.). **Sodium catalyzed reactions II. Side chain ethylation of alkyl aromatic hydrocarbons catalyzed by sodium.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 554-9.

1-05566 — PINES (H.), KNETINSKAS (B.) and IPATIEFF (V.N.). **Oxidative condensation of p-cymene, isopropylbenzen and chloro-isopropylbenzene.** *J. Amer. Chem. Soc.* (1955), 77 No. 2, 343-6.

1-05567 — PINES (H.), VESELY (J.A.) and IPATIEFF (V.N.). **Migration of double bonds in olefinic and diolefinic hydrocarbons catalyzed by sodium. Dehydrogenation of α-limonene to p-cymene.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 347-8.

1-05568 — PINES (H.) and SKAW (A.W.). **Characterization of alkylbenzenes and related hydrocarbons. Friedel-crafts acetylation and the preparation of 2,4-dinitrophenylhydrazones and semicarbazones.** *J. Org.* (1955), 20, No. 4, 373-5.

1-05569 — PLANT (D.), TARBELL (D.S.) and WHITEMAN (C.). **An infrared study of hydrogen bonding involving the thiol group.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1572-5.

1-05570 — PLEKHAN (M.I.), MORDASHEV (S.R.) and KULAKOWSKAYA (N.A.). **In Russian.** (Some N-derivatives of amino-acias and peptidss). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 371-4.

1-05571 — POLLARD (C.B.) and HUGHES (L.J.). **Derivatives of piperazine. XXVII. A modified strecker synthesis ultizing. 1-aryl-piperazines.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 40-2.

1-05572 — PRATT (J.W.) and RICHTMYER (K.). **Transformation of D-allose to 1,6-anhydro-B-D-allopyranol in acid solution.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1906-8.

1-05573 — PRATT (Y.T.) and DRAKE (N.L.). **Quinolinequinones. II. -N-substituted 6-aimno-5,8-quinolinequinones.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 37-40.

1-05574 — PROKOFEIV (M.A.), SHABROVA (Z.A.) and ANTONOVICH (E.G.). **In Russian.** (Synthesis of some halogeno-acetyl and amino-acetyl derivatives of 2-aminopyrimidine and gunine). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 397-410.

1-05575 — RABNIOVICH (B.Ya) and PONOMARIENKO (A. G.). **In Russian.** (Electric conductivity of the systems aluminium chloride-acetamide-nitobenzene and aluminium chloride-urea-nitrobenzene). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 255-60.

1-05576 — RABJOHN (N.) and FARMER (H.H.). **The reaction of methanol with 3-methylphthalic anhydride.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 760-1.

1-05577 — RALL (K.B.) and PEREKLIN (V.V.). **In Russian.** (A new method for the preparation of derivatives of coumarin). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 715-7.

1-05578 — BALL (K.B.) and PEREKALIN (V.V.). **In Russian.** (Reactions of diketene. III. The reaction of diketene with some aromatic hydroxy-compounds. Synthesis of acetoaceyl-phenols) *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 276-81.

1-05579 — RAMADAN (I.A.) and BERZINIA (V.K.). **In Russian.** (Alkylation of diphenyl with alcohols in the presence of phosphoric acid). *J. Gen. Chem., Moscow,* (1955), 25, (87), No. 2, 282-6.

1-05580 — RAMIREZ (F.) and STAFIEJ (S.). **17-Keto à-methyl-D-homosteroids from 17 x-hydroxy-20-amino-C21 steroids. Stereochemistry of D-homoannulation.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 134-8.

1-05581 — RAMSEY (J.B.) and ALBRIDGE (F.T.). **Removal of peroxides from ethers with cerous hydroxide.** *J. Amer. Chem Soc.* (1955), 77, No. 9, 2561-2.

1-05582 — RABJOHN (N.), FRONABARGER (J.W.) and LINSTROMBERG (W.W.). **B-diethylaminoethyl esters of sterically hindered alkyl substituted benzoic acids.** *J. Org. Chem.* (1955), 20, No. 2, 271-3.

1-05583 — RAPORT (H.) and REIST (H.N.). **A method for preparing codeinone.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 490-1.

1-05584 — RAPOPORT (H.) and LAVIGNE (B.). **The preparation of colchicide (dimethoxycolchicine).** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 667-70.

1-05585 — RAPOPORT (H.), CAMPOIN (J.E.) and GORDON (J. E.) **An alternative degradation of colchicine to octahydrodemethoxydesoxydescacetamidocolchicine and hexahydrodemethoxydesacetamidoclochicine.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2389-92.

1-05586 — RAPOPORT (H.), ALLEN (R.H.) and CISNEY (M.E.). **The synthesis of isocolchinol methyl ether.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 670-5.

1-05587 — RAY (P.). **Chemistry of dicyandiamidines and biguanides their metallic complexes.** *J. Indian, Chem, Soc.* (1955), 32, No. 3, 141-56.

1-05588 — REBSTOCK (M.C.) and RAMBAS (L.L.). **The resolution of DL** threo-1-methylsulfonylphenyl-2-amino-1,3-propanediol. *J. Amer. Chem. Soc.* (1955), 77, No. 1, 186-7.

1-05589 — REBSTOCK (M.C.), STRATTON (C.D.) and BAMBAS (L.L.). **Compounds related to chloromycetin 1-biphenylyl and ring-substituted -1-biphenylyl-2-dichloroacetamido-1,3-propanediols.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 24-6.

1-05590 — REINHEIMER (J.D.), BRESSON (C.R.), HOLLOWAY (A.J.) and DAILEY (C.R.). **The Friedel and Crafts reaction in qualitative organic chemistry. III. Aroyl benzioc acids of aromatic ethers.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1909.

1-05591 — REICH (H.). **Phenylglyxylates of steroid alohols.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2562-3.

1-05592 — REINHART (J.), MEITNER (J.G.) and VAN DOLAH (R.W.). **The dissociation of 2,2,2-trinitroethanol inaqueous solution.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 496-8.

1-05593 — RENAULT (J.). **Recherches sur les fonctions thiopyridone-2 et thiopipéridone-2.** *Ann. Chem.* (1955), 10, 135-77.

1-05594 — RIGAUDY (J.) et TARDIEU (P.). **Déshydration des alcools mésodihydroanthracéniques. I. Le dihydro-9-10 anthryl-9 carbinol. Extension de cycle dans la série du dihydro-anthracène,** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1374-9.

1-05595 — RIOBE (O.). **Préparation et propriétés des alcoyl-2 dichloro-3.3 tétrahydropyrannes.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1648-50.

1-05596 — RIOBE (O.) et COTTIN (H.). **Recherches sur les amines -éthyléniques:1amino-1 hexène-4,** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1783-4.

1-05597 — ROBSON (J.H.) and REINHART. **The infrared spectra of N-substituted trifluoro acetamides.** *J. Amer, Chem. Soc.* (1955), 77, No. 2, 498-9.

1-05598 — ROBSON (J.H.). **The nitrolysis of N,N-dialkylformamides.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 107-8.

1-05599 — ROBINS (R.K.) and HITCHINGS (G.H.). **Condensed pyrimidine systems. XII. Synthesis of some 4-and 2,4-substituted pyrido (2,3,-d) pyrimidines.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2256-60.

1-05600 — ROBISON (M.M.) and ROBISON-(B.L.). **7,Azaindole, I. Synthesis and conversion to 7-azatryptophan and other derivatives.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 457-60.

1-055601 — ROBERTS (R.M.), ROPP (G.A.) and NEVILLE (O.K.). **The action of aluminum chloride on ethyl-B-C14-benzene.** *J. Amer. Chem. Soc,* (1955), 77, No. 7, 1764-7.

1-05602 — ROGERS (M.T.) and CRISTOL (S.J.). **The electric moments and configurations of some cis-trans isomers.** *J. Amer. Amer. Chem. Soc.* (1955), 77, No. 3, 764-5.

1-05603 — RONDESTIVEDT (C.S.) and BLANCHARD (H.S.). **Arylation of unsaturated systems by free radicals. I. Arylation of alkylbenzenes.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1769-74.

1-05604 — RONDESTVEDT (C.S.) and VOGL (O.). **Arylation of unsaturated systems by free radicals. II. Arylation of maleimide by diazonium salts.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2315-5.

1-05605 — RONDESTVEDT (C.S.) and WARK (B.H.). **Mechanism of the reaction of pono-olifins with dienophiles. II. A possible free-radical mechanism.** *J. Org. Chem.* (1955), 20, No. 4, 368-72.

1-05606 — RONDESTVEDT J.r, (C.S.) and NICHOLSON (I.). **an evaluation of à 10 disodio-9, 10-dihydroanthraceneas a synthetic in- termediate.** *J. Org. Chem.* (1955), 20, No. 3, 346-52.

1-05607 — RONDESTVEDT (C.S.), SCRIBNER (R.M.) and WULFMAN (C.E.). **Alcoholysis of triarylboranes.** *J. Org. Chem.* (1955), 20, No. 1, 9-12.

1-05608 — ROSEN (W.E.). ZIEGLER (J.B.) and SHABICA (A.C.). **A new type mercuration reaction.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 762-3.

1-05609 — ROBSON (J.H.) and REINHART (J.). **The synthesis of secondary nitramines by the nitrolysis of N,N-disubstituted amides.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2453-7.

1-05610 — ROSENKRANZ (G.), MANCERA (O.) and SONDHEIMER (F.). **Steriods. LX. Synthesis of C-2 oxygenated derivatives of Reichstein's substance S and of cortisone.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 145-8.

1-05611 — ROSENKRANTZ (H.) and SKOGSTROM (P.). **Characteristic infrared absorption bands of steriods with reduced ring A. I. Tetrahydro compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2237-47.

1-05612 — ROTHMAN (E.S.) and WALL (M.E.). **Steroidal sapogenins. XXII. Conversion of hecogenin acetate to hecololactone derivative with the adrenal cortical hormone side chain via allopregnane-3B,-17x, 21 triol-12,20-dione diacetate.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2229-33.

1-05613 — ROTHAMN (E.S.) and WALL (M.E.). **Steroidal sapogenins. XXI. Degradation of hecololactone acetate to derivatives of 12, 13-seco-16-Allopregnene- 3B, 13x -diol - 12 carboxy - 20 one 12,13-lactone.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2228-9.

1-05614 — ROUT (M.K.) and MAHAPATRA (G.N.). **2,B Naphthylmino-4-thiazolidone and its derivatives.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2427-8.

1-05615 — ROYALS (E.E.) and COVINGTON (E.R.). **Synthesis of B-methylcinnamaldehyde.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1697-8.

1-05616 — ROY (J.K.). **A new synthesis of dl-camphonomc acid** *Indian, Chem. Soc.* (1955), 32, No. 3, 173-5.

1-05617 — ROYALS (E.E.) and HORNE (S.E.). **Observations on the rate of autoxidation of d-limonene.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 187-8.

1-05618 — ROYALS (E.E.) and PRASAD (R.N.). **Synthesis of 2-methyl-5-t-butylacylbenzenes.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1696-7.

1-05619 — RUDENKO (N.Z.) and DIONISIEV (D.E.). **In Russian.** (Investigation of the reaction of urea with phenols by methods of physico-chemical analysis. V.). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 265-70.

1-05620 — RUEGGEBERG (W.H.C.), SAULS (T.W.) and NORWOOD (S.L.). **On the mechanism of sulfonation of the aromatic nucleus and sulfone formation.** *J. Org. Chem.* (1955), 20, No. 4, 455-65.

1-05621 — RUSSELL (P.B.) and BALTZLY (R.). **On the configuration of the epimeric 2-(x-N-methyl-N-piperazinobenzyl)-cyclohexanols and related compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 629-33.

1-05622 — SAX (K.J.) and BERGMANN (W.). **Retention of configuration in the wolff rearrangement.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1910-1.

1-05623 — SADEK (H.) and ABUELAMAYEM (M.S.). **The hydrolysis of ethyl acetate in hydrochloric acid solutions containing glucose.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 72-4.

1-05624 — SAGER (W.F.) and DUCKWORTH (A.). **Oxidative ring enlargement of cyclic ketones by peroxytrifluoroacetic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 188-90.

1-05625 — SALMON-LEGAGNEUR (F.) et NEVEU (C.). **Sur l'acide aa-diphénylsubérique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1229-31.

1-05626 — SALCHINKIN (A.P.), LAPKOVA (L.B.) and ARESTENKO (A.P.). **In Russian.** (The oxidation of furfural to succinic acid). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 2, 216-9.

1-05627 — SALMA (J.). **Sur les dérivés diméthylaminés en α ou des esters β-cétoniques.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 789-91.

1-05628 — SALZGEBER (R.). **Sur quelques systèmes binaires d'alcanes normaux liquides à la température ambiante.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1642-4.

1-05629 — SANDOVAL (A.), THOMAS (G.H.), DJERASSI (C.), ROSENKRANZ (G.) and SONDHEIMER (F.). **Steroids. LXI. Synthesis of 19-Nordesoxycorticosterone, a potent mineralocorticoid hormone.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 148-51.

1-05630 — SASIN (G.S.) and SASIN (R.). **Ester exchange reaction of trialkyltin esters and mercaptides.** *J. Org. Chem.* (1955), 20, No. 4, 387-90.

1-05631 — SAUER (C.W.) and BRUNI (R.J.). **Preparation of methylenebisamides.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2559-60.

1-05632 — SAUER (C.W.) and FOLLETT (R.P.). **Nitramines. I. methylenedinitramine.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2560-1.

1-05633 — SCHEER (I.) and MOSETTIG (E.). **Coprostane, cholestane and their 16 B-hydroxy derivatives from steroidal sapogenins.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1820-2.

1-05634 — SCHEER (I.), KOSTIC (R.B.) and MOSETTIG (E.). **The C-25 isomerism of smilagenin and sarsasapogenin.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 641-6.

1-05635 — SCHMERLING (L.), LUVISI (J.O.) and WELCH (R.W.). **Alkylation of benzene with 1,1-dichloro-3,3-dimethylbutane.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1774-6.

1-05636 — SCHMITZ (J.V.). **Preparation of tetraethylene glycol dimethacrylate.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 194-5.

1-05637 — SCHONBERG (A.) and AZIZ (G.). **Furo-chromones and coumarins. X. Prangenin.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2563-4.

1-05638 — SCHROEDER (D.C.). **Thioureas.** *Chem. Revs.* (1955), 55, No. 1, 181-228.

1-05639 — SCHRECKER (A.W.) and HARTWELL (J.L.). **Application of tosylate reductions and molecular rotations to the stereochemistry of lignans.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 432-7.

1-05640 — SCHUBERT (W.M.) and SWEEENEY (W.A.). **The Effect of ring strain on the ultraviolet spectra of α-β-unsaturated carbonyl compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2297-300.

1-05641 — SCHUBERT (W.M.), ZAHLER (R.E.) and ROBINS (J.). **Aromatic electrophilic substitution by hydrogen. V. Ionization equilibria and kinetics of the acid-catalyzed decarboxylation of 2,4,6-trimethoxybenzoic acid and its methyl ester.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2293-7.

1-05642 — SCHUETZ (R.D.) and HOUFF (W.H.). **Carbonyl derivatives of thiophene. I. The Reformatsky reaction with x-bromoesters.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1836-8.

1-05643 — SCHUETZ (R.D.) and HOUFF (W.H.). **Carbonyl derivatives of thiophene. II. Reformatsky reaction with bromine compounds other than α-dromoesters.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1839-41.

1-05644 — SCHWAB (A.W.). **The synthesis of x,x thio-di-n-caproic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 761-2.

1-05645 — SELA (M.) and BERGER (A.). **The terminal groups of poly α-amino acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1893-8.

1-05646 — SERGIEVSKAYA (S.I.) and URETZKAYA (G.Ya). **In Russian.** (Some derivatives of 4-amino-1-methylnqphthalene). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 115-8.

1-05647 — SEN (A.B.) and GUPTA (A.K.S.). **Search for new insecticides. IX.** *J. Indian, Chem. Soc.* (1955), 32, No. 2, 120-2.

1-05648 — SEYFERTH (D.) and ROCHOW (E.G.). **The preparation of polymerizable silanes containing organometallic substituents in the side-chains.** *J. Org. Chem.* (1955), 20, No. 2 250-6.

1-05649 — SHAFIZADEH (F.) and WOLFROM (M.L.). **Synthesis of L-iduronic acid and an improved production of D-glucose-6-C.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2568-9.

1-05650 — SHAH (D.N.), PARIKH (S.K.) and SHAH (N.M.) **Synthesis of flavone and flavonol-6-carboxylic acid and related. derivatives.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2223-4.

1-05651 — SHAH (D.N.) and SHAH (N.M.). **The kostaneckı-Robinson acylation of 5-hydroxy-6-acetyl-4-methylcoumarin.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1699-700.

1-05652 — SHILOV (E.A.) and WEINSTEIN (F.M.). **In Russian** (The structure of the intermediate complex compound in the rearrangement of aromatic sulphonic salts). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 727-9.

1-05653 — SHIRLEY (D.A.) and LEHTO (E.A.). **The metalation of phenoxathin 10-oxide and 10,10-dioxide with n-butyllithium** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1841-3.

1-05654 — SHIRLEY (D.A.), GROSS (B.H.) and ROUSSEL (P.A.). **Metalation of pyrrole, 1-methylpyrrole, and 1-phenylpyrrole with n-yutbllithum.** *J. Org. Chem.* (1955), 20, No. 2, 225-31

1-05655 — SHORR (L.M.), FREISER (H.) and SPEIER (J.L.). **Methyl-silicon cleavage of certain substituted carboxylic acids in sulfric acids I. Kinetics and mechanism.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 547-51.

1-05656 — SHULGIN (A.T.). **Absence of rearrangement in the bromination of sec-butyl alcohol.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2338-9.

1-05657 — SHUYKIN (N.I.) and TULUPOV (V.A.). **In Russian.** (The kinetics of the transformation of piperylene into cyclopentadiene). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. , 731-3.

1-05658 — SHUR (A.M.) and SOKOLOVSKAYA (A.E.). **In Russian.** (Synthesis of the diallyl ester of r-ketopimelinic acid). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 4, 444-5.

1-05659 — SHUNK (C.H.), LAVGNE (J.B.) and FOLKERS (C.). **Studies on carvinolytic compounds. V. 6, 7-Dimethyl-9 (1' (5'desoxy-D-ribityl) isollaxazine.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2210-2.

1-05660 — SKINNER (G.S.), KRYSIAK (H.R.) and PERREGRINO (J.A.). **Spiro-1'-benzensulfonylpiperidine-4,5-barbituric acid and related derivatives of isonipecotic acid.** *J. Amer. Chem. Soc.* (1955), No. 8, 2248-50.

1-05661 — SMITH (B.B.) and LEFFLER (J.E.). **Behaviour of triphenylmethyl chloride in nitromethane.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1700-1.

1-05662 — SMITH (G.G.) and OTT (D.G.). **The proximity effect in the alkaline rearrangement of 1,2-diketones. I. The migratory aptitudes.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2342-3.

1-05663 — SMITH (H.A.) and McDANIEL (E.L.). **The effects of certain nitro and related compounds upon the rate of exchange of deuterium gas with acetic acids over adams platinum catalyst.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 533-5.

1-05664 — SMITH (H.A.) and THOMPSON (R.G.). **Preparation and properties of substituted benzhydryl carbonium ions.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1778-83.

1-05665 — SMITH (B.B.) and LEFFLER (J.E.). **Specific solvent effects in the hydrolysis of p-nitrobenzhydryl bromide.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2509-11.

1-05666 — SMOLIN (E.M.). **Reactions of cyanogen. II. Amines from cyanogen chlorid and olefins.** *J. Org. Chem.* (1955), 20, No. 3. 295-301.

1-05667 — SNEEDEN (R.P.A.) and TURNER (R.B.). **Catalytic dehydrogenation of primary and secondary alcohols with platinum and oxygen:selective dehydrogenation in the steroid series.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 190-1.

1-05668 — SNEEDEN (R.P.A.) and TURNER (R.B.). **Ouabagenin. II. The hydroxyl groups of the A/B ring system.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 130-4.

1-05669 — SYNDER (H.R.) and ELSTON (C.T.). **Polyphosphoric acid as a reagent in organic chemistry. VII. Acylation.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 364-6.

1-05670 — SOUTHWICK (P.L.) and WALSH (W.L.). **The addition of N-bromomorpholine to benzalacetophenone.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 405-8.

1-05671 — SONDHEIMER (F.), VELASCO (M.) and ROSENKRANZ (G.). **Steroids LXII. Synthesis of progesterone 3-cycloethylene ketal.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 192-4.

1-05672 — SOMMER (L.H.) and ANSUL (G.R.). **Hybrid paraffiin-siloxanes with the 1,6-disilahexane grouping.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2482-5.

1-05673 — SOMMER (L.H.), ENGLISH (W.D.), ANDUL (G.R.) and VIVONA (D.N.). **Aliphatic organofunctional siloxanes. III. Synthesis and physical properties of organopolysiloxane diesters.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2485-9.

1-05674 — STAMMER (C.H.), WILSON (A.N.), HOLLY (F. W.) and FOLKERS (K.). **Synthesis of D-4-amino-3-isoxazoldone.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2346-7.

1-05675 — STARKER (L.N.), COSULICH (D.B.) and SMITH (J.M.). **Ethyl 6-oxo-8-alkoxyoctanoates.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2534-6.

1-05676 — STEMPLE (A.), ZELAUSKAS (J.) and AESCHLIMANN (J.A.). **Preparation of 5-substituted 1,3,4-oxidiazol -2(3H) ones and their reactions.** *J. Org. Chem.* (1955), 20, No. 4, 412-8.

1-05677 — STEFANYE (D.) and HOWARD (W.L.) **Cyclic guanidines from nitrimino compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 761-2.

1-05678 — STEIN (G.A.), BRONNER (H.A.) and PFISTER (K.). **α-Metheyl α-amino acid II. Dervaitives of DL-phenylalarine.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 700-3.

1-05679 — STEIN (A.), GREGOR (H.P.) and SPOERRI (P.E.). **Alkyl derivatives of iminodiacetic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 191-2.

1-05680 — STEPHENSI (C.R.), BIANCO (E.J.) and PILGRIM (F.J.). **A new reagent for dehydrating primary amides under mild conditions.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1701-2.

1-05681 — STEVENS, (F.J.) GRIFFIN (T.D.) and FIELDS (L.). **3(2H)-Pyridazones. I. Compounds related to phenacetin.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 42-4.

1-05682 — STEVENS (C.L.), MORROW (D.), and LAWSON (J.). **A new method for the conversion of optically acitve alcohols to haides.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2341-2.

1-05683 — STEWART (L.C.) and RICHYMYER (N.K.). **Formation of 1,6-and 1,7-anhydro-D-glycero-B-D-gulo-heptopyranoses from D-glycero-D-gulo-heptose in acid solution.** *J. Amer. Chem. Soc.* (1955). 77, No. 2, 424-7.

1-05684 — STOLBERG (M.A.), TWEIT (R.C.), STEINBERG (G.M.) and WAGNER - JAUREGG (TH.). **The preparation of O-phenylcarbamyl benzohydroxamate through the lesson rearrangement.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 765-7.

1-05685 — STREITWIESER (A.). **Octane-1,1,1,8,8,8,d.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 195-6.

1-05686 — SUGASAWA (S.) and BAN (Y.) **Studies on the synthesis of emetine. II. Synthesis of rac-rubremetinium bromide.** *Proc. Jap. Acad.* (1955), 13, No. 1, 31-5.

1-05687 — SULIVAN (H.R.) and CALDWELL (W.T.). **Claisen-like condensation reactions with 2,4,6-trimethylpyrimidine.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1559-62.

1-05688 — SURREY (A.R.) WINTHROP (S.O.), RUKWID (M.K.) and TULLAR (B.F.). **The preparation of N-benyl-3 morpholones and N-benzyl-3-homomorpholones from N-(hydroxyalkyl)-chloroacetamides.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 633-6.

1-05689 — SWISTAK (E.). **Actions des échangeurs de cationssur. quelques diols.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 1544-5

1-05690 — SWIETOSLAWSKI (W.) and CIECHOMSKA (R.). **Cryometric investigation of fractions obtained by fractional distillation of 2-picoline.** *Bull. Acad. Polonaise. Soc.* (1955), 3, No. 1, 33-6.

1-05691 — SY (M.), BUU-HOI (N.) et DAT-XUONG (N.). **Synthèse d'acides gras ramifiés ou ω-phénylés par désulfuration de dérivés du thiophène.** *C. R. Acad. Sci., Paris,* (1955), 240 No. 19, 1224-6.

1-05692 — TAFT (R.W.), PURLEE (E.L.), RIESZ (P.) and DEFAZIO (C.A.). **II-Complex and carbonium ion intermediates in olefin hydration and El elimination from t-carbinols. II. Trimethylethylene, methylenecylcobutane, triptene and the effect of effet o'..idty oût W..r hûration rate.** *J.-Amer. Chem. Soc.* (1955), 77, No. 6, -1584-7.

1-05693 — TAGER (A.A.), KRIVOKORYTOVA (R.V.) and KHODOROV (P.M.). **In Russian.** (Heats of solution of polsytyrenens of different molesular weight and the compacteness of the packing of hard chance). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 741-43.

1-05694 — TALUKDAR (P.B.) and BAGCHI (P.). **Synthetic investigations in the camphor series. I. A new synthesis of camphononic acid.** *J. Org. Chem.* (1955), 20, No. 1, 13-7.

1-05695 — TALUKDAR (P.B.) and BAGCHI (P.). **Synthetic investigations in the camphor series. IV. Study of intramolecular cylization of triethyl 2 methylhe ane-2,3,6-tricarboxylate.** *J Org. Chem.* (1955), 20, No. 1, 25-32.

1-05696 — TALUKDAR (P.B.) and BAGCHI (P.). **Synthetic investigations in the camphor series. II. Total synthesis of dl-homocamphoric acid.** *J. Org. Chem.* (1955), 20, No. 1, 18-20.

1-05697 — TALUKDAR (P.B.) and BAGCHI (P.). **Synthetic investigations in the camphorseries. III. New synthesis of al-homoapocamphoric acid.** *J. Org. Chem.* (1955), 20, No. 1, 21-4.

1-05698 — TAMELENT (E.E.) and KNAPP (G.G.). **Synthesis of β-(2-piperidyl) indoles.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1860-2.

1-05699 — TAMELEN (E.E.). **Reaction of cyclohexadiene-1,4- with electrophilic reagents.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1704-6.

1-05700 — TARRANT (P.) and LOVELACE (A.M.). **Free radical additions involving fluorine compounds III. The addition of bromochlorodifluoromethane to olefins.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 768-70.

1-05701 — TARBELL (D.S.), BROOKER (E.G.), VANTERPOOL (A.), CONWAY (W.) CLAUS (C.J.) and HALL (T.J.). **A system for paper chromatography of 3,4-benzpyrene, some derivatives and other polycyclic aromatic hydrocarbons.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 767-8.

1-05702 — TATIBOUET (F.) et FREON (P.). **Préparation des, E-dicétones symétriques.** *C. R. Acad. Sci., Paris,* (1955), No. 11, 1231-2.

1-05703 — TAYLOR (E.C.), PAUDLER (W.W.) and CAIN (C.K.). **The reaction of 5,5-digalobarbituric acids with phyridine.** *J. Org. Chem.* (1955). 20, No. 2, 264-70.

1-05704 — TALOR (E.C.), LOUX (H.M.), FALCO (E.A.) and HITCHINGS (G.H.). **Pyrimidopteridines by oxidatives self-condensation of aminopyrimidines.** *J. Amer. Chem. Soc.* (1955), No. 8, 2243-8.

1-05705 — THIESSEN (G.W.) and MILLER (R.). **Kolbe electrolysis of dl-α bromopropionation in water.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 770.

1-05706 — THOI (L.V.). **Contribution à l'étude de l'acide pinonique et de ses dérivés.** *Ann. Chem.* (1955), 10, 35-91.

1-05707 — TRUCE (W.E.) and HOEGER (F.D.). **The chemistry of sultones. II. Alkylations of organometallic and related compounds by sultones.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2496-500.

1-05708 — TSUDA (K.) and HAYATSU (R.). **Cholesterol and related compounds II. Bromination on 7-ketochole- stanol and 7-ketocholestenol.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 665-7.

1-05709 — TULL (R.), JONES (R.E.), ROBINSON (S.A.) and TSHLER (M.). **Hydroxylation of 17-20 cyanopregnenes by potassium permanganate.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 196.

1-05710 — TYLER (L.J.). **Phenylssilanetriol.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 770-1

1-05711 — QUELET (R.), BORGEL (C.), et DURAND (R.). **Etude des produits obtenus dans la condensation du chloral sur le naphtalène, en présence de chlorure d'aluminum.** *C. R. Acad. Paris,* (1955), 240, No. 19, 1900-2.

1-05712 — VAUGHAN (W.R.) and McCANE (D.I.). **2,3-Pyrrolidinediones. IV. Further studies on tautomerism.** *J. Org. Chem.* (1955), 20, No. 2, 143-54.

1-05713 — VAUGHAN (W.R.) CRAVEN -(R.L.), -LITTLE (R. Q.), and SCHOENTHALER (A.C.). **Addition of hydrogen halides to x,B-unsaturated acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1594-8.

1-06714 — VERGARA (B.U.). **Extraction of reserpine and other alkaloids from colombian** Rauwolfia hirsuta. *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1864.

1-05715 — VELLUZ (L.), AMIARD (G.) et GOFFINET (B.). **Expocydes dérivés du calciférol et du précalciférol.** *C. R. Sci., Paris,* (1955), 240, No. 21, 2076-8.

1-05716 — VISHNEVSKY (N.E.) and MAYOROV (D.M.). **In Russian.** (The method of carrying out autocalve experiments on the hydrogenation of hydrocarbons). *Zh. Prikl. Khim., Lenigr,* (1955), 28, No. 4, 394-401.

1-05717 — VINGEIELLO (F.A.), BORKOVEC (A.) and SHULMAN (J.). **The synthesis of 10-phenyl-1-2-benzanthracene and the three isomeric 10-monomethylpnenyl-1,2-benzanthracenes.** *J.-Amer Chem. Soc.* (1955), No. 8, 2320-2.

1-05718 — WANG (J.H.). **A synthetic compound with catalaselike activity.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 822-3.

1-05719 — WATSON (P.R.). and WOLFF (I.A.). **Depolymerization of a dextran with sonic vibrations or ultraviolet light.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 196-7.

1-05720 — WASSERMAN (H.H.) and AUBERY (N.E.). **The preparation of stereoisomeric epoxy ketones related to chalcone oxide.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 590-4.

1-05721 — WAWZONEK (S.) and NAGLER-(R.C.). **The addition of dialkylamino-and alkylaminomagnesium halides to α-phenylinnamonitrile.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1796-8.

1-05722 — WENDLER (N.L.), HIRSCHMANN-(R.F.), SALTES (H.L.) and WALKER (R.W.). **Configurational relationship of 11, -12-oxygenated sapogenins. Rearrangement to the (3.3.0) bicyclootane system.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1632-6.

1-05723 — WEINMAYR (V.). **Hydrogen fluoride as a condensing agent. VI. Hydrogen fluoride as a solvent for catalytic reduction.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1762-4.

1-05724 — WELCH (F.), WILLIAMS (H.R.) and MOSHER (H.S.). **Organic peroxides IV. Higher dialkyl peroxides.** *J. Amer Chem. Soc.* (1955), 77, No. 3, 551-4.

1-05725 — WEST (R.). **Cyclic organosilicon compounds. III. A fourmembered ring with one Si atom.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2339-40.

1-05726 — WHITE (W.F.) and LANDMAN (W.A.). **Studies on sequences near the N-terminus of corticotropin-A.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 771-2.

1-05727 — WHISTLER (R.L.) and McGILVRAY (D.I.). **2-O-α-D-Xylopyranosyl-L-arabinose from hemicellulose-B of corn cob.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1884-5.

1-05728 — WHISTLER (R.L.) and McGILVRAY (D.I.). **An aldotrioronic acid from hemicellulose-B of corn cob.** *J. Amer. Chem. Soc.* (1955), No. 8, 2212-3.

1-05729 — WIBERG (K.B.) and ROLWAND (B.I.). **1,3-Shifts. III. The kinetics of the thermal rearrangement of phenyl benzanilimino ethers.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2205-9

1-05730 — WIBERG (K.B.) and STEWART (R.). **The mechanisms of permanganate oxidation. I. The oxidation of some aldehydes.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1786-95.

1-05731 — WIBERG (K.B.). **The mechanisms of hydrogen peroxide reactions. II. A comparison of the reactivity of hydroxyl ion and hydroperoxide ion toward benzonitrile.** *J. Amer. Chem. Soc.* (1955), 77, No. 2519-22.

1-05732 — WIESNER (K.), VALENTA (Z.), MANSON (J.A.), and STONNER (F.W.). **Synthesis of dimethylapoerysopine and an approach to the total synthesis of the unrearanged erythrina basis.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 675-83.

1-05733 — WILLITS (C.H.), DECIUS (J.C.), DILLE (K.L.) and CHRISTENSEN (B.E.). **Purines. IV. The infrared spectrum of purine and certain substituted purine derivatives.** *J. Amer. Chem. Soc.* (1955), 77, No. -9, -2569-72.

1-05734 — WILEY (R.H.) and HART (A.J.). **2-Pyrones. XIV. The hydrogenation of 2-pyrones.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2340-1.

1-05735 — WILDS (A.L.), HOFFMAN (C.H.) and PEARSON (T.H.). **-Steroid analogs lacking ring C. V. some analogs of testosterone and androstenedione.** *J. Amer. Chem. Soc,* (1955), 77, No. 3, 647-51.

1-05736 — WILEY (R.H.) and JARBOE (C.H.). **2-Pyrones. XII. r-keto-B-methylgultaconic anhydride arylhydrazones and their conversion to 1-aryl-3-carbox -4-methyl-6-pyridazones.** *J. Amre Chem. Soc.* (1955), 77, No. 2, 403-5.

1-05737 — WILEY (R.H.) and KNABESCHUH (L.H.). **2-Pyrones. XIII. Chemistry of coumalic acid and its derivatvies.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1615-7.

1-05738 — WILEY (R.H.) and MOFFAT (J.). **The structure of quaternary salts from 1-alkyl-1,2,3-triazoles.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1703-4.

1-05739 — WINSTEAD (M.B.), WISHNOFF (S.H.) and BOTS (R.W.). **Dialkylminoethyl esters of some alkoxybenzoic acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 772-4.

1-05740 — WINSTEIN (S.) and INGRAHAM (L.L.). **Neighboring carbon and hydrogen. XVII. the Pinacol rearrangement. Solvolysis of 2-methoxy-2-phenylethyl and related halides.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1738-43.

1-05741 — WOLF (A.P.) and ANDERSON (R.C.). **Radioactive anthracene -C^{14} and acridine-C^{14} from neutron irradiation of acridine.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1608-12.

1-05742 — WOLFF (I.A.), HOFREITER (B.T.), WATSON (P.R.), DEATHERAGE (W.L.) and MACHMASTERS (M.M.). **Structure of a new starch of high amylose content.** *J. Amer Chem. Soc.* (1955). 77, No. 6, 1654-9.

1-05743 — WOODS (L.L.). **Concerning the reaction of kojic acid with potassium cyanide.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1702-3.

1-05744 — WOOLFOLK (F.O.), BEACH (F.E.) and McPHERSON (S.P.). **Phenylazobenzoyl chloride for dentrification and chromatographic sparation of colorless compounds alcohols.** *J. Org. Chem.* (1955), 20, No. 4, 391-96.

1-05745 — WOODS (G.F.), BOLGIAHO (N.C.) and DUGGAN (D.E.). **The chemistry of 1,3,5-hexatriene.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1800-3.

1-05746 — WOTIZ -(J.H.) and BUCO (S.N.). **The Arndt-Eistert synthesis of unsaturated acids.** *J. Org. Chem.* (1955), 20, No. 2, 210-4.

1-05747 — WOTIZ (J.H.), HOLLINGSWORTH (C.A.) and DESSY (R.). **The reaction of 1-alkynes with organometallic compounds. I. 1-hexyne with some alkyl and alkenylmagnesium halides.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 103-5.

1-05748 — WOTIZ (J.H.) and MATTHEWS (J.S.). **The propargylic rearrangement. IV. The origin and structure of the dimeric acid found in the carbonation products of Gringnard reagents from primary propargylic bromides.** *J. Org. Chem.* (1955), 20, No. 2, 155-70.

1-05749 — WUNDERLICH (J.). **Sur la structure cristalline et sur la configuration moléculaire du cellobiose.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 13, 1350-2.

1-05750 — YAKOVLEV (I.P.). **In Russian.** (Catalytic synthesis **of ketones. IV. Synthesis of methylpropylmethylisobutyl-, disopropyl- and isopropylbutyl-ketones.** *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 270-5.

1-05751 — YALE (H.L.). **3-Chloro-10-dialkylaminoalkylphenothazines.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2270-2.

1-05752 — YOUNG (R.W.) and WOOD (K.H.). **The cyclization of 3-acyldithiocarbazate esters.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 400-3.

1-05753 — ZAVARIN (E.) and ANDERSON (A.B.). **Extractive components from incense-ceder heartwood** (Libocedrus decurrens **torry) II. Occurrence and synthesis of p-methoxycarvacrol two new phenolic ompounds** *J. Org.. Chem.* (1955). 20, No. 4, 443-7.

1-05754 — ZAVELDKY (D.Z.) and LISHNEVSKAYA (L.A.). **In Russian.** (Reaction of diazo-compounds with sulphamic acid and its derivatives. III. Investigationof the reaction of hydrolytic decomposition of aryl-1-methyl-3-triazene-3-sulphonic acids *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 362-71.

1-05755 — ZAVARIN (E.) and ANDERSON (A.B.). **Extractive components from incese-ceder heartwood** (Libocedrus decurrens **Torrey). I. Occurrence of carvacrol, hydrothmoquinone, and thymoquinone.** *J. Org. Chem.* (1955), 20, No. 1, 82-8.

1-05756 — ZALUKAEV (L.P.) and BANKOVSKY (Yu.A.). **In Russian.** (A method of preparation of quinaldine without the use of acids). *C. R. Sci. U.R.S.S.* (1955), 100, No. 4, 705-6.

1-05757 — ZECHMEISTER (L.) and PETRACEK (F.J.). **Bis-dehydro-carotenes.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2567-8.

1-05758 — ZIMAKOV (P.V.). **In Russian.** (Behavour of ethylene oxide at high temperature). *J. Phys. Chem., Moscow,* (1955), 29, No. 1, 76-83.

1-05759 — ZOOK (H.D.) and PAVIAK (S.C.). **Fission of t-butyl alkyl ketones in the Schmidt reaction.** *J. Ammer. Chem. Soc.* (1955), 77, No. 9, 2501-3.

1-05760 — ZWINGELSTEIN (G.) et JOUANNETEAU (J.). **Action des agents alcalins sur le querxétine.** *C. R. Sci., Paris,* (1955), 240, No. 9, 981-3.

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1-05761 — ARRONSON (S.). **The purine requirement of** Staphylococcus flavocyaneus. *J. Gen. Microbiol.* (1955), 12, No. 1, 147-55.

1-05762 — ABELSON (P.H.) and VOGEL (H.J.). **Amino acid biosynthesis in** Torulopsis utilis **and** Neurospora crassa. *J. Biol. Chem.* (1955), No. 1, 355-64.

1-05763 — ADA (G.L.) and FERRY (B.T.). **Specific differences in the nucleic acids from A and B strains of influenza virus.** *Nature, London,* (1955), 175, No. 4463, 854-5.

1-05764 — ADRAIN (J.). **Nouvelle technique pour le dosage microbiologique simultané des acides aminés indispensables et conditions de leur extraction en présence de glucides.** *Bull. Soc. Chim. Biol. Paris,* (1955), 27, No. 1, 107-22.

1-05765 — AFANASIEV (P.V.) and MOSOLOV (V.V.). **In Russian.** (The simultaneous action of ferments). *C. R. Sci. U.R.S.S.* (1955), 100, -No. 3, 507-10.

1-05766 — ALLEN (A.), FRIEDMANN (B.) and WEINHOUSE (S.). **Tissue preferences for fatty acid and glucose oxidation.** *J. Biol. Chem.* (1955), 212, No. 2, 921-34.

1-05767 — AMES (B.N.) and MITCHELL (H.K.). **The b osynl thesis of histidine. Imidazoleglycerol phosphate, imidazoleacetophosphate, and histidihol phosphate.** *J. Biol. Chem.* (1955), 212, No. 2, 687-96.

1-05768 — ANDRE (E.) et MAILLE (M.). **Contribution à l'étude des substances insaponifiables des huiles de graines de Crucifères (IV).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1240-1.

1-05769 — ANDREAE (W.A.). **A sensitive method for the estimation of hydrogen peroxide in biological materials.** *Nature, London,* (1955), 175, No. 4463, 859-60.

1-05570 — ANDERSON (A.J.) and MACLAGAN CN.F.). **The isolation and estimation of urinary mucoproteins.** (*Bochem. J.* (1955), 59, Nj. 4, 638-44.

1-05771 — ANDERSON (E.P.) YEN (C.Y.), MANDEL (H.G.) and SMITH (P.K.). **Ureidosuccinic acid as a precursor of nucleic acid pytimid nes in normal and tumor-bearing mice.** *J. Biol. Chem.* (1955), 213, No. 2, 625-33.

1-05772 — ANDERSON (G.). **Paper chromatography of inositol phosphates.** *Nature, London,* (1955), 175, No. 4463, 863-4.

1-05773 — ANDERTON (J.I.) and LOCKE (D.J.). **Extraction of pigment from cooked cured meat products.** *Nature, London,* (1955), 175, No. 4462, 818-9.

1-05774 — APELMANS (F.) and DE DUVE (C.). **Tissue fractionation studies. II. Further observations on the binding of acid phosphatase by rat-liver particles.** *Biochem. J.* (1955), 59, No 3, 426-33.

1-05775 — APPELMANS (F.), WATTIAUX (R.) and DE DUVE (C.). **T ssue fractionation studies. V. The association of acid phosphatase with a special class of cytoplasmic granules in rat liver.** *Biochem. J.* (1955), 59, No. 3, 438-45.

1-05776 — ARMSTRONG (M.D.), SHAW (K.N.F.) and ROBINSON (K.S.). **Studies on phenylketonuria. II. The excretion of o-hydroxyphenyiacetic acid in phenylketonuria.** *J. Biol. Chem.* (1955), 213, No. 2, 797-804.

1-05777 — ARMSTRONG (M.D.) and SHAW (K.N.F.). **Studies on phenylketonuria. III. The metabolism of o-tyrosine.** *J. Biol. Chem.* (1955), 213, No. 2, 805-11.

1-05778 — ARMSTRONG (M.D.). **The phenyialan ne and tyrosine requirements of the rat.** *J. Biol. Chem.* (1955), No. 1, 409-14.

1-05779 — ARTOM (C.). **Effects of choline adminstration on the oxidation of fatty acids by extrahepatic tissues.** *J. Biol. Chem.* (1955), 213, No. 2, 681-7.

1-05780 — ASNIS (R.E.). **A glutathione reductase from** Escherichia coli. *J. Biol. Chem.* (1955), No. 1, 77-86.

1-05781 — AUBERT (J.) et MIHAUD (G.). **Etude du métabolisme de la levure de boulangerie à l'aide de glucose radioacto-** *C. R. Acad. Sci., Paris,* (1955). 240, No. 19, 1943-5.

1-05782 — AUBEL (E.) et PRIEUR (P.). **Sur le caractère adaptif du cycle tricarboxylique chez** Escherichia coli. *C. R. acad. Sci., Paris,* (1955), 240, No. 19, 1945-6.

1-05783 — AZOUZ (W.M.), PARKE (D.V.) and VILLIAMS (R.T.). **Studies in detoxication. 62. The metabolism of halogenobenzenes. Ortho -and** para **dichlorobenzenes.** *Biochem. J.* (1955), 59, No. 3, 410-5.

1-05784 — BAER (E.) and MAURUKAS (J.). **Phosphatidyl serine.** *J. Biol. Chem.* (1955), 212, No. 1, 25-38.

1-05785 — BEAR (E.) and MAURUKAS (J.). **The diazometholysis of glycerolphosphatides. A novel method of determining the configuration of phosphiatdyl sermes and cephalins.** *J. Biol. Chem.* (1955), 212, No. 1, 39-48.

1-05786 — BAGGETT (B.), ENGLE (L.L.) and FIELDING (L. L.). **The estimation of hydroxysteroids.** *J. Biol. Chem.* (1955), 1, 87-98.

1-05787 — BAILEY (J.L.). **The reduction of esters of simple peptides by metal hydrides.** *Biochem, J.* (1955), 60, No. 1, 170-3.

1-05788 — BAILEY (J.L.). **Systematic degradation of peptides from the carboxyl end.** *Biochem. J.* (1955), 60, No. 1, 173-6.

1-05789 — BAKER (R.W.R.). **The determination of calcium in serum by flame photometry.** *Biochem, J.* (1955), 59, No. 4, 566-71.

1-05790 — BARNARD (H.), HOUGH (J.), BASSIR (O.) and STERN (B.E.). **Urinary excereton of a substance after a single dose.** *Nature, London,* (1955), 175- No. 4461, 776-7.

1-05791 — BALIS (M.E.), LARK (C.T.) and LUZZATI (D.), **Nucleotide utilization by** Escherichia coli. *J. Biol. Chem.* (1955). 212, No. 2, 641-6.

1-05792 — BARCLAY (R.K.) and GARFINKEL (E.). **Glycine and adenine as precursors of nucleic acid purines in tumor-bearing mice.** *J. Biol. Chem.* (1955), 212, No. 1, 397-402.

1-05793 — BARTHEL (W.F.), ALEXANDER (B.H.), GIANG (P.A.) and HALL (S.A.). **Insecticidal phosphates.** *J. Amer. Chem. Soc.* (1955), 77, No. 2424-7.

1-05794 — BEAN, R.C., and HASSID (W.Z.). **Asimilation of $C^{14}O^2$ by a photosynthesizing red alga,** Tridophycus flacciaum. *J. Bill. Chem.* (1955), 212, No. 1, 411-26.

1-05795 — BEATON (J.R.) and GOODWIN (M.E.). **Renal glutaminase activities in vitamin B6 deficient rats.** *J. Biol. Chem.* (1955). 212, No. 1, 195-200.

1-05796 — BECK (W.S.). **Determination of troise phosphates and proposed modifications in the aldolase method of Sibleya nd Lehninger.** *J. Biol. Chem.* (1955), 212, No. 2, 847-58.

1-05797 — BEECH (F.W.) and CARR (J.G.). **A survey of inhilitory compounds for the separatiou of Jeasts nnd lacteria in applc juices and ciders.** *J. Gen. Microbiol,* (1955), 12, No. 1, 85-95.

1-05798 — BELTZ (R.E.) and VISSER (D.W.). **Growth inhibition of** Escherichia coli **by new thymidine analogs.** *J. Amer. Chem Soc.* (1955), 77, No. 3, 736-8.

1-05799 — BERGMANN (R.) and KIKSTEIN (S.). **The relationship between spectral shifts and structural changes in uric acids and related compounds.** *J. Amer. Chem. Soc.* (1955), 77, No 3, 691-6.

1-05800 — BERNARD (M.). **Etude polarographique des réactions catalasique et peroxydasique de l'eau oxygénée et des peroxydes organiques.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1248-50.

1-05801 — BERNHARD (S.A.). **A new method for the determation of the amidase kctivity of trypsin:kinetics of the hydrolysis of benzoyl-L-agninеamide.** *Biochem. J.* (1955), 59, No. 3, 506-9.

1-05802 — BERTRAND (D.) et DEWOLF (A.). **Le cadmium peut-il remplacer le zinc comme oligo-élément pour l'**Aspergillus niger. *C. R. Acad. Sci., Paris,* (1955), 240, No. 15, 1626-8.

1-05803 — BERTRAND (D.) et DEWOLF (A.). **A propos de la notion de la necessité du zinc pour l'**Aspergillus niger. *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1821-3.

1-05804 — BETTELHEIM (F.R.). **Amino terminal group in chymotrypsinogen.** *J. Biol. Chem.* (1955), 212, No. 1, 235-40.

1-05805 — SETTELHEIM, (F.R.) and NEURATH (H.). **The rapid activation of chymotrypsinogen.** *J. Biol. Chem.* (1955). 212, No. 1, 241-50.

1-05806 — BIRKINSHAW (J.H.). **Ultraviolet absorption spectra of some polyhdroxyanthraquinones.** *Biochem. J.* (1955), 59, No. 3, 485-6.

1-05807 — BLACK (S.) and WRIGHT (N.G.). **Aspartic B-semialdehyde dehydrogenase and aspartic B-semialdehyde.** *J. Biol. Chem.* (1955), 213, No. 1, 39-50.

1-05808 — BLACK (S.) and WRIGHT (N.G.). **B-aspartokinase vnd B-aspartyl phosphate.** *J. Biol. Chem.* (1955), 213, No. 1, 27-38.

1-05809 — BLANKENHORN (D.H.) and AHRENS (E.H.). **Extraction, isolation,a nd identification of hydrolytic products of triglyceride digestion in man.** *J. Biol. Chem.* (1955), 212, No. 1, 69-82.

1-05810 — BLACK (S.) and WRIGHT (N.G.). **Homoserine dehydrogenase.** *J. Biol. Chem.* (1955), 213, No. 1, 51-60.

1-05811 — BLAGOVESCHENSKY (A.V.) and IVANOVA (I. P.). **In Russian.** (The nitrogen metabolism during the stratiffcation of seeds). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No.-3, 511-3.

1-05812 — BLOOM (B.) and STETTEN (D.). **The fraction of glucose catabolized via the glycolytic pathway.** *J. Biol. Chem.* (1955), 212, No. 2, 555-64.

1-05813 — BOARDMAN (N.K.) and PARTRIDGE (S.M.). **Separation of neutral proteins on ion-exchange resins.** *Biochem, J.* (1955), 59, No. 4, 543-52.

1-05814 — BOCKLAGE (B.C.), DOISY (E.A.), ELLIOTT (WH. and DOISY (E.A.). **Absorption and metabolism of cortisone-4-C14 acetate.** *J. Biol. Chem.* (1955), 212, No. 2, 935-40.

1-05815 — BOMAN (H.G.). **Chromatography of serum and some other proteins on an anion-exchange resin.** *Nature, London,* (1955), 175, No.-4464, 898-9.

1-05816 — BONAR (R.A.) and DUGGAN (E.L.). **The preparation of ribonucleoprotien from yeast.** *J. Biol. Chem.* (1955), 212, No. 2,-697-704.

1-05817 — BOOTH (J.), BOYLAND (E.) and MANSON (D.). **Metabolism of polycyclic compounds. IX. Metabolism of 2-naphthylamine in rat tissue slices.** *Biochem, J.* (1955), 60, No. 1, 62-71.

1-05818 — BOSZORMENTYI -(N.I.). **Formation of phosphopyruvate from phosphoglycerate in hemolyzed human erythrocytes.** *J. Biol. Chem.* (1955), 212, No. 1, 495-500.

1-05819 — BOTHNER-BY (A.A.). **Structure of the adduct of benzoquinone and quinaldine.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 749-50.

1-05820 — BOTHWELL (T.H.) and MALLETT (B.). **The determination of iron in plasma or serum.** *Biochem. J.* (1955), 59, No. 599-602.

1-05821 — BOUCHILLOUX (S.) et ROUCHE (J.). **Contribution a l'étude biochimique de la pourpre des mures.** *Bull. Soc. Chem. Biol. Paris,* (1955), 37, No. 1, 37.

1-05822 — BOYD (D.H.J.) and ADAMS (G.A.). **An assay method for lipoxidase in animal tissue.** *Canad. J.* (1955), 33, No. 2, 191-98.

1-05823 — BOYLAND (E.) and SOLOMON (J.B.). **Metabol sm of polycyclic compounds 8. Acid-labile precursors of naphthalene produced as metabolites of naphthalene.** *Biochem. J.* (1955), 59, No. 3, 518-22.

1-05824 — BRADSHAW (T.E.T.) and JESSOP (W.J.E.). **Placental and blood histaminase in human pregnancy.** *Biochem, J.* (1955), 59, No. 4, 603-5.

1-05825 — BRODIE (A.F.) and LIPMANN (F.). **Identification of a gluconolactonase.** *J. Biol. Chem.* (1955), 212, No. 2, 677-86.

1-05826 — BROWN (R.F.G.). **The chemical constituents of Australian** Flindersia **species. VII. The synthesis of derivatives of kokusaginic and skiammianin c acids.** *Aust. J. Chem.* (1955), 8, No. 1, 121-4.

1-05827 — BROWN (G.M.), IKAWA (M.) and SNELL (E.E.). **Synthesis and microbiological activity of some pantothenic acid conjugates.** *J. Biol. Chem.* (1955), 213, No. 2, 855-67.

1-05828 — BRUNET (P.C.J.) and KENT (P.W.). **Mechanism of sclerotin formation. The participation of beta-glucoside.** *Nature, London,* (1955), 175, No. 4462, 819-20.

1-05829 — BUMPUS (F.M.) and PAGE (I.H.). **Serotonin and ts methylated derivatives in human urine.** *J. Biol. Chem.* (1955), 212, No. 1, 111-6.

1-05830 — BURCH (H.B.), STORVICK (C.A.), BICKNELL (R.L.), KUNG (H.C.), ALEJO (L.G.), EVERHART (W.A.), LOWRY (O.H.), KING (C.G.) and BESSEY (O.A.). **Metabolic studies of precursors of pyridine nucleot des.** *J. Biol. Chem.* (1955), 212, No. 2, 897-908.

1-05831 — BURSTEIN (S.), DORFMAN (R.I.) and NADEL (E.M.). **Corticosteroids in the urine of normal and scorbutic guinea pigs:isolation and quantitative determination.** *J. Biol. Chem.* (1955), 213, No. 2, 597-609.

1-05832 — CANELLAKIS (E.S.) and COHEN (P.P.). **The end-products and intermediates of wric acid oxidation by uricase.** *J. Biol. Chem.* (1955), No. 1, 385-96.

1-05833 — CANELLAKIS (E.S.), TUTTLE (A.L.) and COHEN (P.P.). **A comparative study of the end-products of uric wric acid oxidation by peroxidases.** *J. Biol. Chem.* (1955), No. 1, 397-404

1–05834 — CARSON (J.F.). **The reaction of fructose with sopropylamine and cyclohexylamine.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1881-4.

1–05835 — CAUJOLLE (F.) et GAYREL (P.). **Répartition du bore après injection d'acides phénylborique chez le chien.** *C. R. Acad. Sci., Paris,* (1955), 240, No.-12, 1374-8.

1–05836 — CAVANAUGH (D.J.), HARRIS (J.) and HEARON (J.Z.). **Enzyme inhibition by complexing of substrates. Inhibition of tyrosinase by titanium compounds.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1531-5.

1–05837 — CHADENSON (M.), MOLHO-LACROIX (L.), MOLHO (D.) et MENTZER (C.). **Sur les constituents flavoniques du févier** (Gleditschiatriacanthos). *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1362-4.

1–05838 — CHALLENGER (F.) and WALSHE (J.M.). **Methyl mercaptan in relation to foetor hepaticus.** *Biochem, J.* (1955), 59, No. 3, 372-5.

1–05839 — CHAMBERS (R.W.) and CARPENTER (F.H.). **Ammonolysis of peptides. A method of determining C-terminal amino acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1527-31.

1–05840 — CHAMBERS (R.W.) and CARPENTER (F.H.). **Preparation and properties of some amino acid amides.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1522-6.

1–05841 — CHANCE (B.) and SMITH (L.). **Respiratory pigments of** Rhodospirillum rubrum. *Nature, London,* (1955), 175, No. 4462, 803-6.

1–05842 — CHAKRAVARTY (T.) and CHATTERJEE (A.). **On the constitution of swietenine, the non-bitter principle of the seeds of** Swietenia macrophylla, **King.** *J. Indian, Chem. Soc.* (1955), 32, No. 3, 179-86.

1–05843 — CHAPON (L.). **Microméthode pour la détermination continue et simultanée de Co et de O moyen de l'appareil de Warburg modifié.** *Bull. Soc. Chem. Biol, Paris,* (1955), 37, No 1, 171-80.

1–05844 — CHEFURKA (W.) and SMALLMAN (B.N.). **Identity of the acetylcholine-like substance in the housefly.** *Nature, London* (1955), 175, No. 4465, 946-7.

1–05845 — CHU (T.C.) and CHU (E.J.H.). **Paper chromatography of iron complexes of porphyrins.** *J. Biol. Chem.* (1955), 212, N 1, 1-8.

1–05846 — COAN (S.B.) and PAPA (D.). **Antifungal agents.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2402-4.

1–05847 — COHEN (G.N.) et RICHENBERG (H.V.). **Existence d'accepteurs spécifiques pour les amino-acides chez** Escherichia coli. *C. R. Acad. Sci., Paris,* (1955), 240, No. 21, 2086-8.

1–05848 — CONWAY (E.J.) and CAREY (M.J.). **Muscle sodium.** *Nature, London,* (1955), 175, No. 4461, 773-4.

1–05849 — COLE (R.D.) and LI (C.H.). **Studies on pituiary lactogenic hormone. XIV. A simplified procedure of isolation.** *J. Biol. Chem.* (1955), No. 1, 197-202.

1–05850 — COOKE (R.G.) and SEGAL (W.). **Colouring matters of Australian plants. IV. Haemocorin; a unique glycoside from** Haemodorum corymbosum **Vahl.** *Aust. J. Chem.* (1955), 8, No. 1, 107-13.

1–05851 — COOPER (P.D.). **The site of action of penic llin:some properties of the penicillin-binding component of** Staphylococcus aureus. *J. Gen. Microbiol,* (1955), 12, No. 10. 100-6.

1–05852 — COURTS (A.). **The N-terminal amino ac d residues of gelatin. 3. Enzymic degradation.** *Biochem, J.* (1955), 59, No. 3, 382-6.

1–05853 — CRANDALL (D.I.). **Homogentisic acid oxidase. II. Properties of the crude enzyme in rat liver.** *J. Biol. Chem.* (1955), 212, No. 2, 565-82.

1–05854 — CREASER (E.H.). **Inhibition of induced enzyme formation by purine analogues.** *Nature, London,* (1955), 175, No. 4464, 899-900.

1–05855 — CREASER (E.H.). **The induced (adaptive) biosynthesis of B-galcatosidase in** Staphylococcus aureus. *J. Gen. Microbiol.* (1955), 12, No. 2, 288-97.

1–05856 — CROW (W.D.) and MICHAEL (M.). **The alkaloids of** Kopsia longiflora **merrill. I. Isolation of the alkaloids.** *Aust. J. Chem.* (1955), 8, No. 1, 129-35.

1–05857 — CROW (W.D.) and RIGGS (N.V.). **The alkaliods of** Lupinus varius **L. I. Isolation of the alkaliods.** *Aust. J. Chem.* (1955), 8, No. 1, 136-9.

1–05858 — DAMANSKI (A.F.), TOPALOVIC (R.V.) et PAZARINCEVIC (F.K.). **Rapports entre la vitamine C et la cellulose dans la figue et la feuille de figuier pendant la période de végétation.** *Bull. Soc. Chem. Biol, Paris,* (1955), 37, No. 1, 161-4.

1–05859 — DAS (N.K.), MOHAPATRA (G.N.) and ROUT (M. K.). **Thiazole derivatives as possible fungicides. I. 2-Substituted amino-4:5-dimethylthiazoles.** *J. Indian, Chem. Soc.* (1955), 31, No. 1, 55-7.

1–05860 — DASTUGUE (C.), BASTIDE (P.) et DUBIEF (V.). **Sur la présence de la catalase dans les humeurs et les d'organes d'**Helix pomatia L. *Bull. Soc. Chem. Biol. Paris,* (1955), 37, No. 1, 181-4.

1–05861 — DAUGHADAY (W.H.), LARNER (J.) and HARTNETT (C.). **The synthesis of inositol in the immature rat and chick embryo.** *J. Biol. Chem.* (1955), 212, No. 2, 869-76.

1–05862 — DAVIE (E.W.) and NEURATH (H.). **Identification of a peptide released during autocatalytic activation of trypsinogen.** *J. Biol. Chem.* (1955), 212, No. 2, 515-22.

1–05863 — DAVIE (E.W.) and NEURATH (H.). **The terminal groups of the soy bean trypsin inhibitor.** *J. Biol. Chem* (1955)-212, No. 2, 507-8.

1–05864 — DAVIES (D.A.L.). **The specific polysaccharides of some gram-negative bacteria.** *Biochem, J.* (1955), 59, No. 4, 696-704.

1–05865 — DAVIES (A.). **Some factors affecting lactase activity in** Saccharomyces fragilis **Jolrgensen.** *J. Gen. Microbiol.* (1955), 12, No. 1.

1–05866 — DE GRANDCHAMP-CHAUDUN (A.). **Action comparée de quelques inhib teurs sur l'hydrolyse du saccharose et sur l'hydrolyse faible du raffinose par difiérentes saccharases.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1376-8.

1–05867 — DE GRANDCHAMP-CHAUDUN (A.). **Sur l'hydrolyse diastasique d'un mélange de substrats.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 690-2.

1–05868 — DE MEIO (R.H.), WIZERKANIUK (M.) and SCHREIBMAN (I.). **Enzymatic system synthesizing sulfuric acid esters of phenols.** *J. Biol. Chem.* (1955), No. 1, 439-44.

1–05869 — DE LEIZAOLA (M.) et DEDONDER (R.). **Etude de quelques polyosides produits par des souches de** Rhizobium. *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1825-7.

1–05870 — DJASSI (P.A.), WEISENBORN (F.L.), DYLION (C.M.) and WINTERSTEINER (O.). **The stereochem stry of reserpine.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2028-9.

1–05871 — DIMANT (E.) LANDSBERG (E.) and LONDON (I.M.). **The metabolic behavior of reduced glutathione in human and avian erythrocytes.** *J. Biol. Chem.* (1955), 213, No. 2, 769-76.

1–05872 — DINNING (J.S.). **The role of vitamin E in regulating the turnover rate of nucleic acids.** *J. Biol. Chem.* (1955), 212, No. 2, 735-40.

1–05873 — DIXON (A.ST.J.). **Studies on the use of sulphonated cation-exchange resins for the hydrolysis of ovomucoid.** *Biochem. J.* (1955), 60, No. 1, 165-70.

1–05874 — DORFMAN (A.), ROSEMAN (S.), MOSES (F.E.), LUDOWIEG (J.), and MAYEDA (M.). **The biosynthesis of hyaluronic acid by group A streptococcus. III. Origin of the N-acetylglucosamine moiety.** *J. Biol. Chem.* (1955), 212, No. 2, 583-92.

1–05875 — DRABKIN (D.L.) and MARSH (J.B.). **Metabolic channeling in experimental nephrosis. I. Protein and carbohydrate metabolism.** *J. Biol. Chem.* (1955), 212, No. 2, 623-32.

1–05876 — DREYER (W.J.) and NEURATH (H.). **The activation of chymotrypsinogen.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 814-5.

1–05877 — DUFF (E.L.), HOGEBOOM (G.H.) and STREIBICH (M.J.). **The sedimentation behavior of alcohol dehydrogenase and urease in crude solutions.** *J. Biol. Chem.* (1955), 212, No. 1, 439-48.

1–05878 — DUMAZERT (C.), GHIGLIONE (C.) et TICHADOU (M.B.). **Electrophorèse des protéines sur colonne.** *Bull. Soc. Chem. Biol. Paris,* (1955), 37, No. 1, 123-6.

1–05879 — DUMAZERT (C.) et TICHADOU (M.B.). **Nouveau dispoitif d'élution capillaire pour la chromatographie sur papier.** *Bull. Soc. Chem. Biol., Paris,* (1955), 37, No. 1, 169-70.

1–05880 — DUPUY (P.) et PUISAIS (J.). **Contribution à l'étude chromatographique des pigmentsanthocyaniques chez les Ampélidées.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1802-4.

1-05881 — DURSTEIN (S.) and DORFMAN (R.I.). **Steroid metabolism in guinea pigs. I. Metabolism of cortisol in vivo.** *J. Biol. Chem.* (1955), 213, No. 2, 581-95.

1-05882 — DAUBEN (W.G.) and RICHARDS (F.H.). **The biogenesis of the triterpene, eburicoic acid.** *Chem. Ind.* (1955), No. 4, 94-5.

1-05883 — DZULYNSKA (J.), BARTOSIEWICZ (W.) and GAJZLER (R.). **Phosphatides in serum-protein fractions obtained by salting out and by methanol-precipitation.** *Bull. Acad. Polonaise, Sci.* (1955), 3, No. 1, 27-30.

1-05884 — EDELMAN (J.), GINSBURG (V.) and HASSID (W.Z.). **Conversion of monosaccharides to sucrose and cellulose in wheat seedlings.** *J. Biol. Chem.* (1955), 213, No. 2, 843-54.

1-05885 — EDINGTON (G.M.), LEHMANN (H.) and SCHNEIDER (R.G.). **Characterization and genetics of haemoglobin G.** *Nature, London*, (1955), 175, No. 4463, 850-1.

1-05886 — EDSALL (J.T.), GILBERT (G.A.) and SCHERAGA (H.A.). **The non-clotting component of the human plasma fraction 1-1("Cold insoluble globulin").** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 157-61.

1-05887 — EIMHJELLEN (K.E.) and LARSEN (H.). **The mechanism of itaconic acid fromation by** Aspergillus terreus **2. The effect of sustrates and inhibitors.** *Biochem, J.* (1955), 60, No. 1, 139-47.

1-05888 — ELLFOLK (N.) and SYNGE (R.L.M.). **Detection of pyrrolidone carboxylic acid.** *Biochem, J.* (1955), 59, No. 3, 523-6.

1-05889 — ELWYN (D.), WEISSBACH (A.) HENRY (S.S.) and SPRINSON (D.B.). **The biosynthesis of choline from serine and related compounds.** *J. Biol. Chem.* (1955), No. 1, 281-304.

1-05890 — ENGEL (L.L.) CARTER (P.) and FIELDING (L.L.). **Urinary metabolites of administered corticosterone. I. Steroids liberated by glucuronidase hydrolysis.** *J. Biol. Chem.* (1955), No. 1, 99-106.

1-05891 — EPSZTEIN (R.). **Sur une nouvelle méthode de synthèse des amides-acétyléniques N-disubstitués.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 8, 989-90.

1-05892 — ERICSON (L.E.), WILLIAMS (J.N.) and ELVEHJEM (C.A.). **Studies on partially purified betaine-homocysteme transemethylase of liver.** *J. Biol. Chem.* (1955), 212, No. 2, 537-44.

1-05893 — EISENBERG (F.). **The formation of glucose and glucuronic acid from lactate-3-C-14 in vitro.** *J. Biol. Chem.* (1955), 212, No. 1, 501-5.

1-05894 — FARNWORTH (A.J.). **The reaction between wool and phenyl isocyanate.** *Biochem, J.* (1955), 59, No. 4, 529-33.

1-05895 — FATTERPAKER (P.), MARFATIA (U.) and SREENIVASAN (A.). **Observations on the relationship between pteroylglutamic acid and nicotinamide metabolism.** *Biochem, J.* (1955), 59, No. 3, 470-5.

1-05896 — FELS (I.G.), SIMPSON (M.E.) and EVANS (H.M.). **Purification of the anterior hypophyseal thyrotropic hormone.** *J. Biol. Chem.* (1955), 6o. 1, 311-24.

1-05897 — FESTENSTEIN (G.N.), -HEATON (F.W.), LOWE (J.S.) and MORTON (R.A.). **A constituent of the unsaponifiable portion of animal tissue lipids (λ max. 272 m μ.).** *Biochem, J.* (1955), 59, No. 4, 558-66.

1-05898 — FESTENSTEIN (G.N.) and MORTON (R.A.). **Provitamin D in animal tissues.** *Biochem, J.* (1955), 60, No. 1, 22-5.

1-05899 — FESTENSTEIN (G.N.). **The effect of ergosterol and ergocalciferol on the anaerobic glycolysis of rat-liver slices.** *Bioch. J.* (1955), 59, No. 4, 605-9.

1-05900 — FILIPOWICZ (B.), GOLEWSKI (S.) and PILEK (K.). **On certain regularities in the composition of pancreas ribonucleic acids.** *Bull. Acad. Polonaise, Sci.*)1955), 3, No. 1, 7-10.

1-05901 — FIRKET (H.), MOUCHETTE (R.) et CHEVREMONT (M.). **Comparaison de l'action des dérives du coenzyme a sur la croissance des cellules en culture de tissus.** *Bull. Soc. Chem. Biol. Paris*, (1955), 37, No. 1, 155-60.

1-05902 — FLINES (J.). **The occurrence of a sulfuric acid ester of choline in the mycelium of a strain of** Penicillium chrysogenum. *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1676-7.

1-05903 — FORSYTH (W.G.C.). **Comirin:isolation and properties.** *Biochem, J.* (1955), 59, No. 3, 500-6.

1-5904 — FUKUSHIMA (D.K.), LEEDS (N.S.) BRADLOW (H.L.), KRITCHEVSKY (T.H.), STOKEM (M.B.) and GALLAGHER (T.F.). **The characerization of four new metabolites of adrenocortical hormones.** *J. Biol. Chem.* (1955), 212, -No. -1, 449-60.

1-05905 — FORBES (G.B.) and D'AMBRUSO (M.). **Determination of sodium in bone with the aid of cation exchange chromatography.** *J. Biol. Chem.* (1955), -212, -No. -2, 655-62.

1-05906 — FORSYTH (W.G.C.). **Cacao polyphenolic substances. III. Separation and estimation on paper chromatograms.** *Biochem. J.* (1955), 60, No. 1,-108-11.

1-05907 — FOSTER (R.J.) and NIEMANN (C.). **Re-evaluation of the kinetic constants of previously nvest gated spec fic substrates of x-chymotrypsin.** *J. Amer. Chem. Soc.* (1955), -77, No. 7, 1886-92.

1-05908 — FOX (D.L.). **Astaxanthin in the american flamingo.** *Nature, London*, (1955), 175, No. 4465,-942-3.

1-05909 — FRANCIS (G.E.), MULLIGAN (W.) and WORMALL (A.). **The use of radioactive isotopes in immunological investigations. III. Labelled proteins and protein antigens containg both iodine and mustard gas sulphone groups.** *Biochem, J.* (1955), 60, No. 1, 118-22.

1-05910 — FRANKENBURG (W.G.). **Nicotine degradation in induced by agents from tobacco seed.** *Nature, London*, (1955), 175, No. 4465. 945-6.

1-05911 — FREREJACQUE (M.). **Caractérisation du groupe acétyle dans les hétérosides digitaliques.** *C. R. Sci., Paris*, (1955), 240, No. 1804-5.

1-05912 — FROMAGEOT (P.) et SIRCHIS (J.). **Isolement d'une fraction homogène de l'albumoide du cristallin de boeuf.** *C. R. Acad. Paris*, (1955), 240, No. 17, 1730-2.

1-05913 — FRIEDEN (C.) and ALBERTY (R.A.). **The effect of pH on fumarase acitivity in acetate buffer.** *J. Biol. Chem.* (1955), 212, No. 2, 859-68.

1-05914 — FRY (B.A.). **Glutamine sythesis by** Micrococcus phogenes **var.** aureus. *Biochem, J.* (1955), 59, No. 4. 579-89.

1-05915 — FULLER (R.C.), GRISEBACH (H.) and CALVIN (M.). **-The metabolism of thiotic acid in algae.** *-J. Amer. Chem. Soc.* (1955), -77, No. 9, 2659.

1-05916 — FUKUHARA (T.K.) and VISSER (D.W.). **Cytidine derivatives.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2393-5.

1-05918 — GIATONDE (M.K.) and RICHTER (D.). **The uptake of 35 S into rat tissues after injection of (35S) metionine.** *Bioche, J.* (1955), 59, No. 4. 690-6.

1-05919 — GALE (E.F.) and FOLDES (J.P.). **The assimilation of amino acids by bacteria. 20. The incorporation of labelled amino acids by disrupted staphylococcal cells.** *Biochem, J.* (1955), 59, No. 4, 661-75.

1-05920 — GALE (E.F.) and FOLKES (J.P.). **The assimilation of amino acids by bacteria 21. The effect of nucleic acids on the development of certain enzymic activities in disrupted staphylococcal cells.** *Biochem, J.* (1955), 59, No. 4, 675-84.

1-05921 — GARLINSKAYA (E.I.). **In Russian.** (The molecular complexes of cholesterol). *Zh. Prikl. Khim., Leningr*, (1955), 28, No. 1, 87-93.

1-05922 — GANELLAKIS (E.S.) and COHEN (P.P.). **On the nature of oseonic acid and allautoseaidin as oxidation products of uric acid and allantoin.** *J. Biol. Chem.* (1955), No. 1. 37-948,

1-05923 — GELL (R.J.), HUGHES (G.K.) and RITCHIE (E.). **Alkaliods of** Evodia alata **F. Muell.** *Aust. J. Chem.* (1955), 8, No. 1, 114-20.

1-05924 — GERO (E.). **L'action protectrice de l'acide déhydroascorbique dans l'oxydation des orthodiphénols** *C. R. Acad. Sci.,-Paris*, (1955), 240, No. 19. 1941-3.

1-05925 — GERDELY (J.), GOUVEA (M.A.) and KARIBIAN (D.). **Fragmentation of myosin by chymotrypsin.** *J. Biol. Chem.* (1955), 212, No. 1, 165-78

1-05926 — GERECEDO (L.R.) and EIGH (S.). **Studies on thiamine analogues. IV. Neopyrithiamine and oxyneopyrithiamine. A comparison of their effects** in vivo **and** in vitro. *J. Biol. Chem.* (1955), 213, No. 2, 983-7.

1-05927 — GERO (E.). **Sur les anticatalyseurs de l'oxydation de l'acide l-ascorbique. Action protectrice mutuelle entre la vitamine C et les orthodiphénols.** *C. R. Acad. Sci., Paris*, (1955), 240, No. No. 18, 1818-21

1-05928 — GIANETTO (R.) and DE DUVE (C.). **Tissue fractionation studies IV. Comparative study of the binding of acid phosphatase. B-glucurondase and cathepsin by rat-liver particles.** *Biochem, J.* (1955), 59, No. 3, 433-8.

1-05929 — GIBSON (F.), JONES (M.J.), and TELTSCHER (H.). **Synthesis of indole and anthranilic acid by mutants of Escherichia coli.** *Nature, London,* (1955), 175, No. 4463, 852-4.

1-05930 — GLEASON (G.I.). **Some notes on the exchange of iodine with thyroxine homologues.** *J. Biol. Chem.* (1955), 213, No. 2, 837-41.

1-05931 — GOKSOYR (J.). **Reversal of the fungicidal effect of dithiocarbamyl compounds.** *Nature, London,* (1955), 175, No. 4462, 820-1.

1-05932 — GOODWIN (T.W.), LAND (D.G.) and OSMAN (H.G.). **Studies in carotenogenesis. XIV. Carotenoid synthesis in the photosynthetic bacterium** Rhodopseudomonas spheriodes. *Biochem, J.* (1955), 59, No. 3, 491-6.

1-05933 — GRANT (N.H.) and ROBBINS (K.C.). **A new pancreatic proteinase.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 2027-8.

1-05934 — GREGOIRE (J.), ET LIMOZIN (N.). **Sur l'activité des cholinestérases. I. Méthode de dosage spectrophotométrique de l'activité des cholinestérases.** *Bull. Soc. Chem. Biol. Paris,* (1955), 37, No. 1, 65-79.

1-05935 — GREENSTIEN (J.P.), IZUMIYA (N.), WINTZ (M.) and BIRNBAUM (S.M.). **Studies on diastereoisomeric α-amino acids and corresponding α-hydrox acids I. Preparation of the four isomers of α-aminotricarballylie acid and thier conversation to the corresponding isocitric acid lactones.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 707-16.

1-05936 — GREGOIRE (J.), GREGOIRE (J.) et LIMOZIN (N.). **Sur l'activité des cholinestérases. II. Application de la méthode specérases purifiées aux trés failbles concentrations en substrat.** *Bull. Soc. Chem, Biol, Paris,* (1955), 37, No. 1, 81-8.

1-05937 — GROGAN (C.H.) and OPPENHEIMER (H.). **Experimental studies in metal cancerigenesis. III. Behavior of chromium compounds in the pysiological pH range.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 152-7.

1-05938 — GROSS (D.) and GRODSKY (G.). **On the sublimation of amino acids and peptides.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1678-80.

1-05939 — GREEN (M.) and STAHMANN (M.A.). **Preparation and enzymatic hydrolysis of poly-ethylglutamyl bovine plasma albumin.** *J. Biol. Chem.* (1955), No. 1, 259-70.

1-05940 — GROTH (D.P.) and LEPAGE (G.A.). **Synthesis of propanediol phosphate-2-C14 from pyruvamide-2-C14 and the purification of labeled pyruvic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1681-2.

1-05941 — GUNSTONE (F.D.). **Animal fats. V. The component acids of chimpanzee fat.** *Biochem, J.* (1955), 59, No. 3, 454-5.

1-05942 — GUNSTONE (F.D.). **Animal fats. VI. The component acids of tiger fat and of puma fat.** *Biochem, J.* (1955), 59, No. 3, 455-8.

1-05943 — HALL (R.H.) and KHORANA (H.G.). **Nucleoside polyphosphates. III. Syntheses of pyrimidine nucleoside 2'(3), 5'-diphosphates.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1871-5.

1-05944 — HALL (D.A.) and GARDINER (J.E.). **The reaction between elastase and elastic tissue. II. Preparation and properties of the enzyme.** *Biochem, J.* (1955), 59, No. 3, 465-70.

1-05945 — HALE (H.P.) and BROOKS (J.). **Strength of the shell of the hen's egg.** *Nature, London,* (1955), 175, No. 4463, 848-9.

1-05946 — HALL (D.A.). **The reaction between elastase and elastic tissue I. The substrate.** *Biochem, J.* (1955), 59, No. 3, 459-65.

1-05947 — HAMILTON (P.B.) and ANDERSON (R.A.). **Hydroxylysine: isolation from gelatin and resolution of its diastereoisomers by ion exchange chromatography.** *J. Biol. Chem.* (1955), No. 1, 249-58.

1-05948 — HARDY (S.) and PUTNAM (F.W.). **Proteins in multiple myeloma. IV. Interaction with metabolic nitrogen.** *J. Biol. Chem.* (1955), 212, No. 1, 371-7.

1-05949 — HARRIS (J.I.) and LI-(C.H.). **Corticortopins (ACTH). IV. The action of carboxypeptidase on a-corticotropin, and the C-terminal amino acie sequence.** *J. Biol. Chem.* (1955), 213, No. 2, 499-506.

1-05950 — HARTMAN (S.C.), LEVENBERG (B.) and BUCHANAN (J.M.). **Involvement of ATP, 5-phosphoribosylpyrophosphate and L-azaserine in te enzymatic formation of glycinamide ribotide intermediates in inosinic acid biosynthesis.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 501-3.

1-05951 — HARMAN (W.J.), POGRUND (R.S.), DRELL (W.) and CLARK (W.G.). **Studies on the biosynthesis of arterenol enzymatic decarboxlation of diastereoisomers of hydroxyphenylserines.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 816-7.

1-05952 — HAREL-CEDDAHA (L.). **Sur l'oxydation de l'acide octanoique en présence d'adrénaline, par les homogénats de foie de Rat.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 688-90.

1-05953 — HAUSMANN (W.), WEISIGER (J.R.) and CRAIG (L.C.). **Partial hydrolysis studies with bactracin A.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 723-31.

1-05954 — HAUSMANN (W.), WEISIGER (J.R.) and CRAIG (L.C.). **Bacitracin A. further studies on the composition.** *J. Amer. Chem. Spc.* (1955), 77, No. 3, 721-2.

1-05955 — VAN HEILJNINGEN (A.J.M.K.) and KEMP (A.). **Free and fixed glycogen in rat muscle.** *Biochem, J.* (1955), 59, No. 3, 487-91.

1-05956 — HENNEMAN (P.H.), ROURKE (G.M.) and JACKSON (W.P.U.). **Depression of serum alkaline phosphatese acrivity human serum albumin.** *J. Biol. Chem.* (1955), 213, No. 1, 19-26.

1-05957 — HEPPEL (L.A.), WHITFELD (P.R.) and MARKHAM (R.). **A note on the structure of triphosphopyridine nucleotide.** *Biochem, J.* (1955), 60, No. 1, 19-21.

1-05958 — HEPPEL (L.A.), WHITFELD (P.R.) and MARKHAM (R.). **Nucleotide exchange reactions catalysed by ribonuclease and spleen phosphodiesterase. 2. Synthesis of polynucleotides.** *Biochem, J.* (1955), 60, No. 1, 8-15.

1-05959 — HEPPEL (L.A.) and WHITFELD (P.R.). **Nucleotide exchange reactions catalysed by ribonuclease and spleen phosphodiesterase. I. Synthesis and interconversion of simple esters of ribomononucleotides.** *Biochem, J.* (1955), 60, No. 1, 1-7.

1-05960 — HERBERT (E.), POTTER (V.R.) and TAKAGI (Y.). **Nucleotide metabolism. IV. The phosphorylation of 5'-uridine nucleotides by cell fractions from rat liver.** *J. Biol. Chem.* (1955), 213, No. 2, 923-40.

1-05961 — HERMANN (R.L.), FAIRLEY (J.L.) and BYERRUM (R.U.). **The synthesis of purines and thymine from methionine in the rat.** *J. Amer. Chem. Soc.* (1955), 77, No. 1902-4.

1-05962 — HIDY (P.H.), HODGE (E.B.), YOUNG (V.V.), HARNED (R.L.), BREWER (G.A.), PHILLIPS (W.F.), RUNGE (W.F.), STAVELY (H.E.), POHLAND (A.), BOAZ (H.) and SULLIVAN (H.R.). **Structure and reactions of cycloserine.** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2345-6.

1-05963 — HILDES (J.A.) and FERGUSON (M.H.). **The concentration of electrolytes in norman human saliva.** *Canad. J.* (1955), 33, No. 2, 217-25.

1-05964 — HOFMANN (K.) and TAUSIG (F.). **On the identity of phytomonic and lactobacillic acids. A reinvestigation of the the fatty acid spectrum of** Agrobacterium (Phytomonas) tumefaciens. *J. Biol. Chem.* (1955), No. 1, 425-32.

1-05965 — HOFMANN (K.) and TAUSIG (F.). **The chemical nature of the fatty acids of a group C** Streptococcus **species.** *J. Biol. Chem.* (1955), No. 1, 415-24.

1-05966 — HOLDEN (M.) and PIRIE (N.W.). **A comparison of leaf and pancreatic ribonuclease.** *Biochem, J.* (1955), 60, No. 1, 53-62.

1-05967 — HOLDEN (P.) and PIRIE (N.W.). **The partial purification of leaf ribonuclease.** *Biochem, J.* (1955), 60, No. 1, 39-46.

1-05968 — HOLDEN (M.) and PIRIE (N.W.). **The preparation of ribonucleic acid from yeast, tobacco leaves and tobacco mosaic virus.** *Biochem, J.* (1955), 60, No. 1, 46-53.

1-05969 — HOLLEY (R.W.). **Enzymatic removal of the protecting group in peptide synthesis.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2552-3.

1-05970 — HOPE (D.B.). **Pyridoxal phosphate as the coenzyme of the mammalian decarboxylase for L-cysteine sulphinic and L-cysteic acids.** *Biochem, J.* (1955), 59, No. 3, 497-500.

1-05971 — HORECKER (B.L.), SMYRNOITIS (P.Z.), HIATT (H.H.) and MARKS (P.A.). **Tetrose phosphate and the formation of sedoheptulose diphosphate.** *J. Biol. Chem.* (1955), 212, No. 2, 827-36.

1-05972 — HORECKER (B.L.) and SMYRNIOTIS (P.Z.). **Purification and properites of yeat transaldolase.** *J. Biol. Chem.* (1955), 212, No. 2, 811-26.

1-05973 — HOWARD (B.H.) and RAISTRICK (H.). **Studies in the biochemistry of micro-organisms. 94. The colouring matters of colouring matter of** Aspergillus quadrilineatus **Thom-Raper.** *Biochem, J.* (1955), 59, No. 3, 475-84.

1-05974 — HUENNEKENS (F.M.) BASFORD (R.E.) and GABRIO (B.W.). **An oxidase for reduced diphosphopyridine nucleotide.** *J. Biol. Chem.* (1955), 213, No. 2, 951-67.

1-05975 — HUFFMAN (M.N.) and LOTT (M.H.). **16-Substituted steroids. XI. Estradiol 3-16B.** *J. Biol. Chem.* (1955), No. 1, 343-8.

1-05976 — HUMPHREYS (T.E.) and STUMPE (P.K.). **Fat metabolism in higher plants. IV. Preparation of soluble fatty acid oxidases from peanut microsomes.** *J. Biol. Chem.* (1955), 213, No. 2, 941-9.

1-05977 — HURWITZ (J.) and COOPERSTEIN (S.J.). **Reduction of cytochrome oxidase by liver aldehyde oxidase.** *J. Biol. Chem.* (1955), 212, No. 2, 771-86.

1-05978 — KURWITZ (J.). **Inhibition studies on aldehyde oxidase.** *J. Biol. Chem.* (1955), 212, NoW 2, 757-70.

1-05979 — IKAWA (M.) and O'BARR (J.S.). **The isolation of of a, a'-diaminopimelic acid from** Lactobacillus arabinosus. *J. Biol. Chem.* (1955), 213, No. 2, 877-80.

1-05980 — INGRAM (V.M.). **Sulphydryl groups in haemoglobins.** *Biochem, J.* (1955), 59, No. 4, 653-61.

1-05981 — JACOBSHON (K.P.) et AZEVEDO (M.D.). **Etude sur la succinocéhydrase de** E. coli **induite par biosynthèse.** *Bull. Soc. Chem. Biol. Paris,* (1955), 37, No. 1, 139-46W

1-05982 — JANOT (M.-M.) et LE MEN (J.). **Sur la vincamajoridine, deuxième alcaloide cristallisé de la grande pervenche** Vinca major **L. Apocynacées).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 8, 909-11.

1-05983 — JANICKI (J.) and PAWELKIEWICZ (J.). **A new vitamin (vitamins) of the B group produced by** Propionobacterium shermanii. *Bull. Acad. Polonaise, Sci.* (1955), 3, No. 1, 5-6.

1-05984 — JANOT (M.) et GOUTAREL (R.). **Alcaloïdes de s** Voacanga **voacangine** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1800-2.

1-05985 — JANOT (M.) et GOUTAREL (R.). **Alcaloïdes des** Voacanga **voacamine et vobtusine.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 17, 1719-20.

1-05986 — JEDEIKIN (L.A.) and WEINHOUSE (S.). **Metabolism of neoplastic tissue. VI. Assay of oxidized and reduced diphosphopyridine nucleotide in normal and neoplastic tissues.** *J. Biol. Chem.* (1955), No. 1, 271-80.

1-05987 — JIRGENSONS (B.). **Further studies on characterization of human serum albumin by means of optical rotation.** *J. Amer. Chem. Sco.* (1955), 77, No. 8, 2289-92.

1-05988 — JOHNSTON (J.P.). **A comparison of the properties of hyaluronic acid from normal and pathological human synobial fluids.** *Biochem, J.* (1955), 59, No. 4, 626-33.

1-05989 — JOHNSTON (J.P.). **The sedimentation behaviour of mixtures of hyaluronic acid and albumin in the ultracentrifuge.** *Biochem, J.* (1955), 59, No. 4, 620-6.

1-05990 — JOHNSTON (J.P.). **The viscosity of normal and pathological human synovial fluids.** *Biochem. J.* (1955), 59, No. 4, 633-7.

1-05991 — JOHNSON (W.J.). **The inhabition of sulphanilamide acetylation by aromatic and heterocyclic carboxamides and carboxydrazides.** *Canad. J.* (1955), 33, No. 2, 107-11.

1-05992 — JONES (M.E.) SPECTOR (L.) and LIPMANN (F.). **Carbamyl phosphate, the carbamyl donor in enzymatic citrulline synthesis.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 819-20.

1-05993 — JONES (N.R.). **The free amino acids of fish. I-Methylhistidine and B-alanine liberation by skeletal muscle ansernase of codling** (Gadus callaria). *Biochem, J.* (1955), 60, No. 1, 81-7.

1-05994 — KANTIENGAR (N.L.) and MORTON (R.A.). **The administration to rats of cholesta-**3:5-7-one. *Biochem, J.* (1955), 60, No. 1, 30-4.

1-05995 — KNATIENGAR -(N.L.) and MORTON (R.A). **For. mation of cholesta-**3:5-dien-7-one **in rats.** *Biochem, J.* (1955), 60, No. 1, 28-9.

1-05996 — KARJALA (S.A.). **The partial characterization of a histamine metabolite from rat and mouse rune.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 5-4.

1-05997 — KAPLAN (N.O.), CIOTTI (M.), STOLZENBACH (F.E.) and BACHUR (N.R.). **Isolation of a DPN isomer containing nicotinamide riboside in the x-linkage.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 815-6.

1-05998 — KALYANASUNDARAM (R.) and DEVI (L.S.). **Zinc in the metabolism of** Fusarium vasinfectum **atk.** *Nature, London,* (1955), 175, No. 4465, 945.

1-05999 — KANTIENGAR (N.L.), LOWE (J.S.), MORTON (R.A.) and PITT (G.A.J.). **The effects of administering cholesterol and cholesta-**3:5-dien-7-one **to cockerels.** *Biochem, J.* (1955), 60, No. 1, 34-9.

1-06000 — KANTEINGAR (N.L.) and MORTON (R.A.). **Cholestra-**3:5-dien-7-one **in human aterosclerotic aortas.** *Biochem, J.* (1955), 60, No. 1, 25-8.

1-06001 — KATZ (J.) and CHAILKOFF (I.L.). **The metabolism of propionate by rat liver slices and the formation of isosuccinic acd.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2659-60.

1-06002 — KELLIN (J.). **Reactions of free haematins and haemoproteins with nitric oxide and certain other substances.** *Biochem, J.* (1955), 59, No. 4, 571-9.

1-06003 — KELLY (T.L.), NIELSON (E.D.., JOHNSON (R.B.) and VESTLING (C.S.). **Glucose-6-phosphate dehydrogenase of adrenal tissue.** *J. Biol. Chem.* (1955), 212, No. 2, 545-54.

1-06004 — KENNEDY (E.P.) and WEISS (S.B.). **Cytidine diphosphate choline. A new intermediate in lecithin biosynthesis.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 250-1.

1-06005 — KIGARA (H.) and SNELL (E.E.). **Peptides and bacterial growth. VII. Relation to inhibitions by thienylalanine, ethionine, and canavanine.** *J. Biol. Chem.* (1955), 212, No. 1, 83-94.

1-06006 — KIKNADZE (I. I.) **Iss Russian The chanye of** nuleic acids during the fertilization and the develoment of Cyclops fuscus). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 571-4.

1-06007 — KINNORY (D.S.), TAKEDA (Y.) and GREENBERG (D.M.). **Chromatography of carboxylic acids on a silica gel column with a benzene-ethersolvent system.** *J. Biol. Chem.* (1955), 212, No. 1, 379-84.

1-06008 — KINNORY (D.S.), TAKEDA (Y.) and GREENBERG (D.M.). **Isoltope studies on the metabolism of valine.** *J. Biol. Chem.* (1955), 212, No. 1, 385-96.

1-06009 — KIT (S.). **The conversion of acetate-2-C14 to glycine by cell suspensions of the gardner lymphosarcoma.** *J. Biol. Chem.* (1955), 212, No. 1, 311-8.

1-06010 — KOCH (J.H.). **Cobalt chloride and the alpha-cells of the pancreas.** -*Nature, London,* (1955), 175, No. 4463, 856-7.

1-06011 — KOVACHEVICH (R.) and WOOD (W.A.). **Carbohydrate metabolism by** Pseudomonas fluorescens. **III. Purification and properties of a 6-phosphogluconate dehydrase.** *J. Biol Chem.* (1955), 213, No. 2, 745-56.

1-06012 — KOVACHEVICH (R.) and WOOD (W.A.). **Carbohydrate metabolism by** Pseudomonas fluorescens. **IV. Purification and properties of 2-keto-3-deo y-6-phosphogluconate aldolase.** *J. Biol. Chem.* (1955), 213, No. 2, 757-68.

1-06013 — KLEMPERER (H.G.). **The uncoupling of oxidative phosphorylation n rat-lever mitochondria by thyroxine, triiodothyronine and related substances.** *Biochem, J.* (1955), 60, No. 1, 122-8.

1-06014 — KLEMPERER (H.G.). **The uptake of thyroxine and triiodothyronine by rat-liver mitochondria.** *Biochem, J.* (1955), 60, No. 1, 128-35.

1-06015 — KLOETZEL (M.C.), DAYTON (R.P.) and ABADIR (B.Y.). **Synthetic analogs of cortical hormones. I. Homogentisic ac d and** α,2,5, **trihydroxyxcetophenone derivatives from** 2,5-2,5-diacetoxy- α-d **azoacetophenone.** *J. Org. Chem.* (1955), 20, No. 1, 38-49.

1-06016 — KLOSTERMAN (H.J.), SMITH (F.) and CLAGETT (C.O.). **The constitution of linocinnamarine.** *J. Amer. Chem.* (1955), 77, No. 2, 420-1.

1-06017 — KONAREV (V.G.). **In Russian.** (The role of nitrogen and phosphorus in the formation of albumins and nucleic acids in plants). *C. R. Acad. Sci. U.R.S.S.* (1955), 100- No. 3, 515-7.

1-06018 — KOVALSKY (V.V.) and RAETSKAYA (Yu.I.). **In Russian.** (Synthesis of vitamin B12 in the body of sheep under the action of cobalt and calcium in a biogeochemical region poor in . *(olalt) C R. acad. Sbi, U.R.,S.S,* (1953), 100, No. 6, 1131-4.

1-06019 — KRING (J.P.) and WILLIAMS (J.N.). **Interference in the fluorometric analysis of pyridine nucleotides by certain ions.** *J. Biol. Chem.* (1955), 212, No. 2, 751-6.

1-06020 — KUEHI (F.A.), WOLF (F.J.), TRENNER (N.R.), PECK (R.L.), BUSH (R.P.), PUTTER (I.), ORMOND (R.), LYONS (J.E.), CHAIET (L.), HOWE (E.), HUNNEWELL (B.D.), DOWNING (G.), NEWSTEAD (E.), and FOLKERS (K.). **D-4-Amino-3- soxazolidone, a new antibiotic,** *J. Amer. Chem. Soc.* (1955), 77, No. 8, 2344-5.

1-06021 — KUZOVKOV (A.D.). **In Russian.** (Study of the asonite alkaloids. IV. Investigation of the structure of the alkaloid elatine). *J. Gen. Chem., Moscow,* (1955), 25 (87), No. 2, 422-4.

1-06022 — LANGNER (R.R.) and VOLKMANN (C.M.). **The fate of ingested acetyl-L- and D-tryptophan in the human subject.** *J. Biol. Chem.* (1955), No. 1, 433-8.

1-06023 — LAREZE (F.). **Fermentation aicoolique en présence de quelques combinaisons de métaux de la famille du platine.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 8, 919-21.

1-06024 — LARNER (J.). **The action of crystalline muscle phosphorylase on outer chains of glycogen and amylopectin.** *J. Biol. Chem.* (1955), 212, No. 1, 9-24.

1-06025 — LARSEN (H.) and EIMHGELLEN (K.E.). **The mechanism of itaconic acid formation by** Aspergillus terreus **I. The effect of acidity.** *Biochem. J.* (1955), 60, No. 1, 135-9.

1-06026 — LARSON (E.B.) and SMITH (F.). **The constitution of the galactomannan of the seeds of the kentudky coffee gan** (Gymnocladus dioica). *J. Amer. Chem. Soc.* (1955), 77, No. 2, 429-32.

1-06027 — LASCELLES (J.). **The conversion of am nolaevulic acid to pophyrins by photosynthetic bacteria.** *J. Gen. Microbiol,* (1955), 12, No. 1, *i-ii.*

1-06028 — LASSOTA (Z.), SZAFRANSKI (P.), SZARKOWSKA (L.), and SZARKOWSKI (W.). **The carbon metabolism of Mycobacterium.** *Bull. Acid. Polonaise, Sci.* (1955), 3, No. 1, 11-4.

1-06029 — LAURENT (T.C.) and GERGELY (J.). **Light scattering studies on hyalurinic acid**. *J. Biol. Chem.* (1955), 212, No. 1, 325-34.

1-06030 — LAUTOUT (M.) et MENDE (S.de). **Phénomènes d'association et électrophorèse.** *C. R. Acad, Sci., Paris,* (1955), 240, No. 11, 1282-4.

1-06031 — LEGRANB (M.). **Spectrophotométrie du chlohydrate d'hématoporphyrine.** *Bull. Soc. Chem. Biol. Paris,* (1955), 37, No. 1, 133-8.

1-06032 — LE PEINTRE (M.) et OLIVIER (H.-R.). **Fixation sur les cheveux de l'arsenic minéral en solution aqueuse.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 754.

1-06033 — LEUTSKY (K.M.) and LEUTSKAYA (Z.K.). **In Russian.** (The dependance of the vitamin A and carotene content in the organism on the presence of albumin inn the diet). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 519-20.

1-06034 — LEVY (A.L.), GESCHWIND (I.I.) and LI (C.H.). **Corticotropins (ACTH). II. Amino acid composition of a-corticotrop n.** *J. Biol. Chem.* (1955), No. 1, 187-96.

1-06035 — LEVY (A.L.) and LI (C.H.). **Cort cotrop ns (ACTH). III. K net c stud es on the react on of N-term nal group reagents w th a-cort cotron n, and N-term nal group analys s.** *J. Biol. Chem.* (1955), 213, No. 2, 487-89.

1-06036 — LEVY (H.M.), MONTANEZ (G.) and DUNN (M.S.). **Effect of ethionine and fasting on the free amino acids of rat liver.** *J. Biol. Chem.* (1955), 212, No. 2, 985-90.

1-06037 — LEVVY (G.A.) and WORGAN (J.T.). **The preparation and properties of B-glucuronidase. 7. Act on on ester glucuron des.** *Biochem, J.* (1955), No. 3, 451-3.

1-06038 — LEIBERMAN (I.). **Enzymatic amination of uridine triphosphate to cytidine triphosphate.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2661-2.

1-06039 — LIEBERMAN (I.) and KORNBERG (A.). **Enzymatic synthesis and breadkown of pyrimid ne, orotic acid. III. Ureidoccinase.** *J. Biol. Chem.* (1955), 212, No. 2, 909-20.

1-06040 — LIGHSTEIN (H.C.). **The presence of bound biotin in purified preparations of oxal acetic carboxylase.** *J. Biol. Chem.* (1955), 212, No. !, 217-22.

1-06041 — LI (C.H.), GESCHWIND (I.I.), DIXON (J.S.), LEVY (A.L.) and HARRIS (J.I.). **Corticotropins (ACTH). I. Isolation of a-corticotropin from sheep pituitary glands.** *J. Biol. Chem.* (1955), No. 1, 171-86.

1-06042 — LINKER (A.), MEYER (K.) and WEISSMANN (B.). **Enzymatic formation of monosaccharides from hyaluronate.** *J. Biol. Chem.* (1955), No. 1, 237-48.

1-06043 — LISSITZKY (S.) et BOUCHILLOUX (S.). **Sur une microméthode de dosage sur papier des activites catalytiques II. Application à la mesure des activités enzymatiques.** *Bull. Soc Chem. Biol. Paris,* (1955), 37, No. 1, 97-105.

1-06044 — LISSITZDY (S.) **Sur une microméthode de dosage sur papier des activités catalytiques. I. Iltra- microdosage de l'iode organique.** *Bull. Soc. Chem. Biol., Paris,*-(1955), 37, No. 1,-89-96.

1-06045 — LOEWUS (F.), TCHEN (T.T.) and VENNESLAND (B.). **The enzymatic transfer of hydrogen. III. The reaction catalyzed by malic dehydrogenase.** *J. Biol. Chem.* (19555), 212, No. 2, 787-800.

1-06046 — LOGOTHETOPOULOS (J.) and SCOTT (R.F.). **Concentration of iodine-131 across the palcenta of the guinea pig and the rabbit.** *Nature, London,* (1955), 175, No. 4461, 775-6.

1-06047 — LOMBARDO (M.E.), MANN (P.H., VISCELLI (T.A.) and HUDSON (P.B.). **A method for the extraction of steroids from blood.** *J. Biol. Chem.* (1955), 212ff No. 1, 345-52.

1-06048 — LOMBARDO (M.E.), VISCELLI (Y.A.), MITTEL MAN (A.) and HUDSON (P.B.). **The removal of non-steroidal pigments of urinary extracts by adsorption on charcoal.** *J. Biol. Chem.* (1955), 212, No. 1, 353-60.

1-06049 — LONGENECKER (J.B.) and SNELL-(E.E.). **A poss bie mechanism for kynureninase action.** *J. Biol. Chem.* (1955), No. 1, 229-36.

1-06050 — LORENZ (W.), HENGLEIN (A.) and SCHRADER (G.). **The new insecticide 0,0-dimethyl 2,2,2-tr chloro-1-hydroxyethylphosphonate.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2554-6.

1-06051 — LOVE (S.H.), and GOTS (J.S.). **Purine metabolism in bacteria. III. Accumulation of new pentose-containing arlymne by a purine requ ring mutant of** Escherichia coli. *J. Biol. Chem* (1955), 212, No. 2, 647—54.

1-06052 — LOWENSTEIN (J.M.) and COHEN (P.P.). **Studias on the mechanism of carbamylaspartic acid synthesis** *J. Biol. Chem.* (1955), 231, No. 2, 689096.

1-06053 — LOWE (I.P.) and ROBERTS (E.). **Incorporation of radiactive sulfate sulfur into taurine and other substances in the chick embryo.** *J. Biol. Chem.* (1955), 212, No. 1, 477-84.

1-06054 — MACHLIN (L.J.), PEARSON (P.B.) and DENTON (C.A.). **The utilization of sulfate sulfur for the synthesis of taurine in the developing chick embryo.** *J. Biol. Chem.* (1955), 212, No. 1, 469-76.

1-06055 — MAGSANIK (B.) and BOWSER (H.R.). **The degradation of histidine by** Aerobacter aerogenes. *J. Biol. Chem.* (1955), 213, No. 2, -571-80.

1-06056 — MAGASINIK (B.). **The mètablic control of histidine assimilation and dissimilation in** Aerobacter aerogenenes. *J. Biol, Chem.* (1955), 213, No. 2, 557-69.

1-06057 — MAHLER (H.R.), FAIRHURST (A.S.) and MACKLER (B.). **Studies on metalloflavoproteins. IV. The role of the metal.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1514.-21.

1-06058 — MAIER (V.P.) and TAPPEL (A.L.). **Antioxidat activity of redox dyes.** *Nature, London,* (1955), 175, No. 4465, 951-2.

1-06059 — MANN (P.J.G.). **Purification and properties of the amine oxidase of pea seedlings.** *Biochem, J.* (1955), 59, No. 4, 609-20.

1-06060 — MANNERS (D.J.) and RYLEY (J.F.). **Studies on the metabolism of the protozoa. 6. The glycogens of the parasite flagellates Trichomonas** foetus **and** Trichomonas galinae. *Biochem. J.* (1955), 59, No. 3, 369-72.

1-06061 — MANN (F.G.) and HART (F.A.). **An optically active spirocyclic phosphonium salt.** *Nature, London,* (1955), 175, No. 4465, 952.

1-06062 — MAPSON (L.W.) and MOUSTAFA (E.M.). **The oxidation of glutathione by a lipoxidase enzyme from pea. seeds.** *Biochem, J.* (1955), 60, No. 1, 71-80.

1-06063 — MARSH (C.A.). **A glucuronic-decomposing enzyme from rumen micro-organisms. 3. Mode of action, specificity and inhibition by acidic sugar derivatives.** *Biochem, J.* (1955), 59, No. 3, 375-82.

1-06064 — MASLOV (N.Ya.) and MOLODTZOV (V.A.). **In Russian.** (Investigation of the fatty oil from the seeds of Digitalis lanata Ehrh.) *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 3, 334-6.

1-06065 — MASON (H.S.) and CRONYN (M.). **On the role of polyphenoloxidase in lignin biosynthesis.** *J. Amer, Chem. Soc.* (1955), 77, No. 2, 491-2.

1-06066 — MASON (H.S.) and PETERSON (E.W.). **The reaction of quinones with protamine and nucleoprotamine:N-terminal proline.** *J. Biol. Chem.* (1955), 212, No. 1, 485-94.

1-06067 — MAZUR (A.), BAEZ (S.) and SHORE (E.). **The mechanism of iron release from ferritin as related to its biological properties.** *J. Biol. Chem.* (1955), No. 1, 147-60.

1-06068 — McCONNELL (K.P.) and VAN LOON (E.J.). **Distribution of Se75 in serum proteins as determined by paper electrophoresis.** *J. Biol. Chem.* (1955), 212, No. 2, 747-50.

1-06069 — McDOWELL (C.A.). **The primary photochemical process in bormine.** -*Nature, London,* (1955), 175, No. 4463, 860-1.

1-06070 — McKERNS (K.W.) and NORDSTRAND (E.). **An in vitro assay of corticotrophin.** *Canad. J.* (1955), 33, No. 2, 209-16.

1-06071 — McNAUGHT (M.L.), GLASCOCK (R.F.), -BALMAIN (J.H.) and FOLLEY (S.J.). **Effects of adrenal corticoids on fatty acid synthesis in mammary glaad slices** in vitro. *Biochem, J.* (1955), 60, No. 1, 102-8.

1-06072 — MEAD)T.H.). **Apparatus and technique for two-dimensional paper ioniphoresis.** *Biochem, J.* (1955), 59, No. 4, 534-43.

1-06073 — MEINHART (J.O.) and SIMMONDS (S.). **Serine metabolism in a mutant strain of** Escherichia coli **strain K-12.** *J. Biol. Chem.* (1955), No. 1, 329-42.

1-06074 — MELVILLE (D.B.), HORNER (W.H.), OTKEN (C.C.) and LUDWIG (M.L.). **Studies on the origin of ergothioneine in animals.** *J. Biol. Chem.* (1955), 213, No. 1, 61.

1-06075 — MELCHIOR (J.B.) and HILKER (D.M.). **Enzymes in pituitary tissure.** *J. Biol. Chem.* (1955), 212, No. 1, 187-94.

1-06076 — METZLER (D.E.) and SNELL (E.E.). **Spectra and ionization constants of the vitamin B6 group.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2431-7.

1-06077 — MEYNEIL (G.) et de MENDE (S.). **Etude électrophorétique des protéines du sérum chez les animau irradiés.** *Bull. Soc. Chem. Biol. Paris,* (1955), 37, No. 1, 127-32.

1-06078 — MIGIOCOVSKY (B.B.) and JAMIESON (J.W.S.). **Calcium absorption and vitamin D.** *Canad. J.* (1955), 33, No 2, 202-8.

1-06079 — MILHAUD (G.), AUBERT (J.P) et BOYER (F.). **Isolement et identification du N,-acétyl-p-aminophénylsulfamide dans l'urine de Rats traités au p-aminophénylsulfamide.** -*C. R. Acad. Sci., Paris,* (1955), 240, No. 21, 2090-1.

1-06080 — MILLER (C.O.), SKOOG (F.), OKUMURA (F.S.), SALTZA (M.H.) and STRONG (R.M.). **Structure and synthesis of kinetin.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2662-3.

1-06081 — MILULASZEK (E.) **A method for the quantitave determination of precipitate constituents in precipitating polysaccharide systems.** *Bull. Acad. Polonase, Sci.* (1955), 3, No. 1, 21-6.

1-06082 — MISTRY (S.P.), VADOPALAITE (I.), CHANG (I.), FIRTH (J.) and JOHNSON (B.). **Vitamin B12 and transmethylation in pig, chick and rat liver homogenates.** *J. Biol. Chem.* (1955), 212, No. 2, 713-22.

1-06083 — MOFFETT (R.B.), WHITE (J.L.), ASPERGREN (B.D.) and VISSCHER (F.E.). **Antispasmodics. VI. Pyrrolidylalkyl esters and quaternary salts.** *J. Amer. Chem. Soc.* (1955), *Soc.* (1955), 77, No. 6, 1562-5

1-06084 — MOFFETT (R.B.), WHITE (J.L.), ASPERGREN (B.D.) and VISSCHER (F.E.). **Antispasmodics. VII. Aminoethyl esters of substituted glycolic and acetic acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1565-8.

1-06085 — MORTENSON (L.E.) and WILSON (P.W.). **Metabolism of robos-5-phosphate by** Azotobacter vinelandii. *J. Biol. Chem.* (1955), 213, No. 2, 713-22.

1-06086 — MORRISON (M.) and STOTZ (E.). **Partition chromatography of hemins. Separation of the prosthetic groups of cytochromes a and a3.** *J. Biol. Chem.* (1955), No. 1, 373-8.

1-06087 — MOSBY W(L.). **The ultraviolet absorption spectra of of some highly chlorinated aromatic systems.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 758-60.

1-06088 — MARSH (J.B.) and DRABKIN (D.L.). **Metabolic channeling in experimental nephrosis. II. Lipide metabolism,** *J. Biol. Chem.* (1955), 212, No. 2,-633-40.

1-06089 — MUSAJO (L.), BENASSI (C.A.) and PARPAJOLA (A.). **Isolation of kynurenine and 3-hydroxykynureine from hyman pathological urine.** *Nature, London,* (1955), 175, No. 4463, 855-6.

1-06090 — NEKHOROCHEFF (J.). **Métabolisme de la créatine dans le coeur isolé des vertébrés.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 21, 2088-700.

1-06091 — NEKHOROCHEFF (J.). **Dégradation et synthèse de la créatine dans le coeur isolé de Crapaud.** *C R. Acad. Sci., Paris,* (1955), 240, No. 11, 1284-5.

1-06092 — NETIEN (G.) et LACHARME (J.). **Apparition de pigments authocyaniques:test d'activité des antibiot ques sur la plantule de radis.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6 692-4.

1-06093 — NEWTON (B.A.). **The site of action of polymyxin on** Bacillus megatsrium. *J. Gen. Microbiol,* (1955), 12, No. 1, V.

1-06094 — NICHOLAS (H.J.), WADKINS (C.L.) and HILTIBRAN (R.C.). **The distribution of triterpenes in plants.** Chemopodium album.
J. Amer. Chem. Soc. (1955), 77, No. 2. 495-6.

1-06095 — NICOLAIDES (N.), REISS (O.K.) and LANGDON (R.G.). **The** in vitro **lipid metabolim of the human skin. I. Biosyntheses in scaip skin.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1535-8.

1-06096 — NICOLLE (J.), JOYEUX (Y.) et WALLE (J.). **Etude de la déshydrogénation des formes x et B du xylose dans l'eau lourde.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1823-5.

1-06097 — OGSTON (A.G.) and TILLEY (J.M.A.). **Studies on the heterogeneity of crystallized B-lactoglobulin.** *Biochem, J.* (1955), 59, No. 4, 644-53.

1-06098 — OLIVARD (J.) and SNELL (E.E.). **Growth and enzymatic activities of vitamin B6 analogues. I. D-Alanine synthesis, synthesis.** *J. Biol. Chem.* (1955), No. 1, 203-14.

1-06099 — OLIVARD (J.) and SNELL (E.E.). **Growth and enzymatic activities of vitamin B6 analogues. II. Synthesis of miscellaneous amino acids.** *J. Biol. Chem.* (1955), No. 1, 215-28.

1-06100 — OLIVIER (H.R.) et LE PEINTRE (M.). **Fixation de l'arsenic sur les cheveux par voie biochimique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 8, 923-5.

1-06101 — OLMSTED (P.S.) and VILLEE (C.A.). **Nucleic acid composition of human liber cell fractions.** *J. Biol. Chem.* (1955), 212, No. 1, 179-86.

1-06102 — PARKE (D.V.) and WILLIAMS (R.T.). **Studies in detoxication. 63. The-metabolism of halogenobenzenes. (a) Melta -dichlorobenzene. (B) Further observations on the metabolism of chlorobenzene.** *Biochem, J.* (1955). 59, No. 3, 415-22.

1-06103 — PARKE (D.V.). **Studies in detoxication 64. The sythesis of the isomeric dichlorophenylmercapturic acids.** *Biochem, J.* (1955), 59, No. 3, 422-6.

1-06104 — PAVLOVA (N.A.). **In Russian.** (Biosynthesis of glycocoll from glyoxylic acid and amino-acids). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 947-9.

1-06105 — PAWELKIEWICZ (J.). **Precursors of the biosynthesis of vitamins of the B group.** *Bull. Acad. Polonaise, Soc.* (1955), 3, No. 1, 3-4.

1-06106 — PHARES (E.F.) and LONG (M.V.). **The complete degradation of carbon-14 labeled succininc acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2556-7.

1-06107 — PIERCE (J.G.). **Separation ofthe glycyl from the phynylalanyl chain of oxidized insulin by countercurrent distribution.** *J. Amer. Chem. Soc.* (1955), 77, No. 1, 184.

1-06108 — PIGULEVSKY (G.V.) and KURANOVA (I.L.). **In Russian.** (A new method for the determination of the structure of hydroxy-amino-acids). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 2, 213-6.

1-06109 — PINEY W(.R.), BEARD (M.F.) ana VAN LOON (E.J.). **The vitamin B12 content of electrophoretic fractions of liver homogenates.** *J. Biol. Chem.* (1955), 212, No. 1, 117-24.

1-06110 — POLONOVSKI (M.), PESSON (M.) et ZELNIK (R.). **Alcoylation de la théophylline au moyen des bases de Mannich.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 21, 2079-80.

1-06111 — PORTER (K.R.) and TAMM (I.). **Direct visualization of a mucoprotein component of urine.** *J. Biol. Chem.* (1955), 212, No. 1, 135-40.

1-06112 — PORTMAN (O.W.) and MANN (G.V.). **The disposition of taurine S35 and taurocholate-S35 in the rat: dietary influences.** *J. Biol. Chem.* (1955), 213, No. 2, 733-43.

1-06113 — POPJAK (G.) and TIETZ (A.). **Biosynthesis of fatty acid in cell-free preparations. 2. Synthesis of fatty acids from acetate by a soluble enzyme system prepared from rat mam-mary gland.** *Biochem, J.* (1955), 60, No. 1, 147-55

1-06114 — PORTER (R.R.). **The fractionation of rabbit γ-globuliu by partition chromatography.** *Biochem, J.* (1955.) 59, No. 3, 405-10.

1-06115 — PRINS (H.K.) and HUISMAN (T.H,J.). **Cbromatographic estimation of different kinds of human haemoglihin.** *Nature, London,* (1955), 175, No. 4464, 903-4.

1-06116 — PRONIN (S.I.). **In Russian.** (Peculiarities observed during the termal inactivation of the amylase of non-germinatea rye). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 753-6.

1-06117 — PROSTENIK (M.), SALZMAN (N.P.) and CARTER (H.E.). **Preparation and stereochemistry of 1-benzyl-2-carbiosoproposcy-3-methylethylenimines.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1856-9.

1-06118 — PULESTON (H.S.), POE (C.F.) and WITT (N.F.). **Inhibition studies with pyrimidines on streptococcus faecalis R.** *J. Biol. Chem.* (1955), 212, No. 1, 319-24.

1-06119 — PUTNAM, (F.W.) and HARDY (S.). **Proteins in multiple myeloma. III. Origin of bence-jones protein.** *J. Biol. Chem.* (1955), 212, No. 1, 361-70.

1-06120 — RABINOVITZ (M.), OLSON (M.E.) and GREENBERG (D.M.). **Relation of energy processes to the incorporation of amino acids into proteins of the Ehrilich ascites carcinoma.** *J. Biol. Chem.* (1955), 213, No. 1, 1-10.

1-6121 — RAFELSON (M.E.). **Conversion of acetate-1-C14 to tryptophan in** Aerobacter aerogenes. *J. Biol. Chem.* (1955), 212, No. 2, 953-62.

1-06122 — RAFELSON (M.E.). **Conversion of radioactive glucose and acetate to tryptophan by** Aerobacter aerogenes. *J. Biol. Chem.* (1955), No. 1, 479-86.

1-06123 — RAINE (L.). **The binding of vitamin B12 by castle's intrinsic factor.** *Nature, London,* (1955), 175, No. 4461, 777-8.

1-06124 — RAW (I.). **Phosphorylation coupled with elctron transport to cytochrome C by soluble animal enzymes.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 503-4.

1-06125 — RAYMOND-HAMET. **Sur la présence ignorée jusqu' ici d'un alcaloïde sympathicolytique dans les tiges d'une Rubiacaée asiatique:**l'Ourouparia formosana **Matsumura et Hayata.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 17, 1721-3.

1-06126 — REED (L.J.) and NIU (C.I.). **Syntheses of DL-X-lipoic acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 416-9.

1-06127 — REGISTER (U.D.) ana BARTLETT (R.G.). **Effect of cold and restraint on tissue nonprotein sulfhydryl compounds in restraint on tissue nonprotein sulfhydryl compounds in methionine deficient rats.** *J. Biol. Chem.* (1955), 212, No. 2, 741-6.

1-06128 — RENOLD (A.E.), HASTINGS (A.), NESBETT (F. B.) and ASHMORE (J.). **Studies on carbohydrate metabolism in rat liver slices. IV. Biochemical sequence of events after insulin administration.** *J. Biol. Chem.* (1955), No. 1, 135-46.

1-06129 — REYNAUD (J.). **Régulation automatique de la compensation au cours des électrophorèses de longue dureé.** *Bull. Soc. Chem. Biol. Paris,* (1955), 37, No. 1, 185-90.

1-06130 — RICE (L.M.), GROGAN (C.H.) and REID (E.E.). **Hypotensive agents V. Hydrogenated bis-isiondole quaternary salts.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 616-21.

1-06131 — RIGAS (D.A.) ana OSGOOD (E.E.). **Purification and properties of the phytohemagglutinin of** Phaseolus vulgaris. *J. Biol. Chem.* (1955), 212, No. 2, 607-16.

1-06132 — RIVOIRE (R.), RIVOIRE (J.) and POUJOL (J.). **The determination of urinary 17-trioxysteroids.** *J. Biol. Chem.* (1955), 213, No. 1, 11M8.

1-06133 — ROBBINS (J.), PETERMANN (M.L.) and RALL (J.E.). **Electrophoresis of the thyroxine binding protein of serum at pH** 4.5. *J. Biol. Chem.* (1955), 212, No. 1, 403-10.

1-06134 — ROCHE (J.), MOURGUE (M.) et DOKHAN (R.). **Sur la formation de dérivés guanidiques par oxydation de l'arginine.** *Bull. Soc. Chem. Biol. Paris,* (1955), 37, No. 1, 55-64.

1-06135 — ROCHE (J.), MICHEL (R.), WOLF (W.) et NUNEZ (J.). **Sur présence dans la thyroglobuline de la 3:3'-diiodothyronine, nouvelle hormone thyroidienne.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 8, 921-3.

1-06136 — RODKEY (F.L.). **Oxidation reduction potentials of the diphosphopyridine nucleotide system.** *J. Biol. Chem.* (1955), 213, No. 2, 777-86.

1-06137 — ROE (J.H.). **The determination of sugar in blood and spinal fluid with anthrone reagent.** *J. Biol. Chem.* (1955), 212, No. 1, 335-44.

1-06138 — ROLL (P.M.) and WELIKY (I.). **The utilization of nucleotides by the mammal. II. N15 labeled purine nucleotides.** *J. Biol. Chem.* (1955), 213, No. 2, 509-22.

1-06139 — ROSE (W.C.), COON (M.), LAMBERT (G.F.) and HOWE (E.E.). **The amino acid requirements of man. VIII. The metabolic availability of the optical isomers of acetyltryptophan.** *J. Biol. Chem.* (1955), 212, No. 1, 201-6.

1-06140 — ROSENBERG (A.I.). **In Russian.** (The anionic exchange between the plasma and the erythrocytes). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, -757-60.

1-06141 — ROWBOTTOM (J.). **The radiolysis of aqueous solutions of tyrosine.** *J. Biol. Chem.* (1955), 212, No. 2, 877-86.

1-06142 — ROSE (W.C.), LEACH (B.E.), COON (M.J.) and LAMBERT)G.F.). **The amino acid requirements of man. IX. The phenylalanine requirement.** *J. Biol. Chem.* (1955), 231, No. 2, 913-22.

1-06143 — RUDNEY (H.). **Synthesis of B,B-dimethylacrylic acid acid in rat liver homogenates.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1698-9.

1-06144 — RUNDO (J.) and SAGILD (U.). **Total and 'exchargeable' potassium in humans.** *Nature, London,* (1955), 175, No. 4461, 774.

1-06145 — RUPE (C.O.) and FARMER (C.J.). **Amino acid studies in the trasformation of proteins of the hen's egg to tissue proteins during incubation.** *J. Biol. Chem.* (1955), 213, No. 2, 899-906.

1-06146 — RUTMAN (J.), RUTMAN !R.) and TARVER (H.). **Studies on Protein synthesis in vitro. V. The effact of diet and fasting on the incorporation of methionine S35 into liver protein.** *J. Biol. Chem.* (1955), 212, No. 1, 95-104.

1-06147 — RYLEY (J.F.). **Studies on the metabolism of the protozoa. 4. Metabolism of the parastic flagellate** Strigomonas oncopelti. *Biochem, J.* (1955), 59, No. 3, 353-61.

1-06148 — RYLEY (J.F.). **Studies on the metabolism of the protozoa. 5. Metabolism of the parastic flagellate** Trichomonas foetus. *Biochem, J.* (1955), 59, No. 3, 361-9.

1-06149 — SADYKOV (A.S.), OTROSCHENKO (O.S.) and ESHBAEV (A.E.). **In Russian.** (Separation of the alkaloids of Anabasis qphylla by ammonium chloride). *Zh. Prikl. Khim., Liningr,* (1955), 28, No. 4, 440-4.

1-06150 — SALGUES (R.). **Les alcools terpéniques aliphatiques primaires de l'essence de** Tillandsia trangrans **Ed. André.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1801-4.

1-06151 — SALTON (M.R.J.). **Isolation of** Streptomyces **srp. capable of decomposing preparations of cell walls from various micro-organisms and a comparison of their lytic activities with those of cetain actionomycetes and my obacteria.** *J. Gen. Microbiol,* (1955), 12, No. 1, 25-30.

1-06152 — SANGER (F.), THOMPSON (E.O.P.) and KITAI (R.). **The amide groups of insulin.** *Biochem, J.* (1955), 59, No. 3, 509-18.

1-06153 — SAN PIETRO (A.), KAPLAN (N.O.) and COLOWICK (S.P.). **Pyridine nucleotide transhydrogenase. VI. Mechanism and stereospecificity of the reaction in** Pseudomonas fluorescens. *J. Biol. Chem.* (1955), 212, No. 2, 941-52.

1-06154 — SCHAFFERT (R.R.) and KINGSLEY (G.R.). **A rapid simple method for the determination of reduced, dehydro-, and total ascorbic acid in biological material.** *J. Biol. Chem.* (1955), 212, No. 1, 59-68.

1-06155 — SCHAYER (R.W.), KOBAYASHI (Y.) and SMILEY (R.L.). **Determination of histamine as an isotopic derivative.** *J. Biol. C(19hem.* 55), 212, No. 2, 593-8.

1-06156 — SCHILLER (S.), MATHEWS (M.B.), GOLDFABER (L.), LUDOWIEG (J.) and DORFAMAN (A.). **The metabolism of mucopolysaccharides in animals. II. Studies in skin utilizing labeled acetate.** *J. Biol. Chem.* (1955), 212, No. 2, 531-6.

1-06157 — SCHMID (K.). **Isolation of a group of α_2-glycoproteins from human plasma.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 742-5

1-06158 — SCHMID (R.) and SHEMIN (D.). **The enzymatic formation of porphobilinogen from δ-aminolevulinic acid and its conversion to protoporphrin.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 506-7.

1-06159 — SCHMIDT (G.), GREENBAUM (L.M.), FALLOT (P.), WALKER (A.C.) and THANNHAUSER (S.J.). **The amounts of glycerophosphoryl esters in some tissues.** *J. Biol. Chem.* (1955), 212, No. 2, 887-96.

1-06160 — SCHMITT (H.) GONNARD (P.) et GILKMAN (G.). **Action inhibitrice de quelques phénoxyisopropylamines sur l'aminoxydase.** *Bull. Soc. Chem. Biol. Paris*, (1955), 37, No. 1, 147-54.

1-06161 — SCHROEDER (L.J.), IACOBELLIS (M.) and SMITH (A.H.). **The influence of water and pH on the reaction between amino compounds and arbonhydrates.** *J. Biol. Chem.* (1955), 212, No. 2, 973-84 .

1-06162 — SEAMAN (G.R.) and NASCHKE (M.D.). **Removal of thioctic acid from enzymes.** *J. Biol. Chem.* (1955), 213, No. 2, 705-11.

1-06163 — SEGAL (H.L.). **Kinetic studies on the phenol-sulfate conjugating system of rat liver.** *J. Biol. Chem.* (1955), No. 1, 161-70.

1-06164 — SENEAR (A.E.). **The preparation of dl-alloisocitric lactone.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2564-5.

1-06165 — SHEPPARD (E.), IMPERANTE (J.) and WRIGHT (I.S.). **The effect of phosphorylated hesperidin on the polymerization of fibrinogen as studied by light scattering.** *J. Biol. Chem.* (1955), 212, No. 2, 837-46.

1-06166 — SHEPHERD (J.A.) LI (Y.W.) MASON (E.E.) and ZIFFREN (S.E.). **The distribution of aconitase and fumarase in homogenantes of human liver.** *J. Biol. Chem.* (1955), No. 1, 405-8

1-0167 — SHULMAN (c.z.). **A proteoyltic inhibitor with anticoagulant activity separated from human urine and plasma.** *J. Biol. Chem.* (1955), 213, No. 2, 655-71.

1-06168 — SHULL (G.M.) and KITA (D.A.). **Microbiological conversion of steroids I. Introduction of the 11B-hydroxyl group into C_{21} steroids.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 763-4.

1-06169 — SIEGELMAN (H.W.). **Quercetin glycosides of Grimes golden apple skin.** *J. Biol. Chem.* (1955), 213, No. 2, 647-54.

1-06170 — SINEX (F.M.) PLAZIN (J.) CLAREUS (D.), BERNSTEIN (W.), VAN SLYKE (D.D.) and CHASE (R.). **Determination of total carbon and its radioactivity. II. Reduction of required voltage and other modifications.** *J. Biol. Chem.* (1955), 213, No. No. 2, 673-80

1-06171 — SINGH (B.) and MITCHISON (D.A.). **Bactericidal activity of striptomycin and isoniazid in combination with p-aminosalicylic acid against Mycobacterium tuberculosis.** *J. Gen. Gen. Microbiol*, (1955), 12, No. 1, 76-84.

1-06172 — SKRIGAN (A.I.). **In Russian.** (Chemical constitution of the lignin of a pine tree aged one thousand years). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1135-7.

1-06173 — SLACK (H.G.B.). **The metabolism of sulphated polysaccharides in limb atrophy in the rat.** *Biochem, J.* (1955), 60, No 1, 112-8.

1-06174 — SLATER (E.C.). **Phosphorilation coupled with the oxidation of α-ketoglutarate by heart-muscle sarcosoma III. Experiments with ferricytochrome c a shydrogenaceptor** *Biochem, J.* (1955), 59, No. 3, 392-405.

1-06175 — SLEIN (M.W.). **Xylose isomerase from** Pasteurella pestis. *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1663-7.

1-06176 — SMITH (R.A.) and GUNSALUS (I.C.). **Distribution and formation of isocitritase.** *Nature, London*, (1955), 175, No. 4461, 774-5.

1-06177 — SMITH (E.L.) and SPACKMAN (D.H.). **Leucine aminopeptidase. V. activation, specificity, and mechanism of action** *J. Biol. Chem.* (1955), 212, No. 1, 271-300.

1-06178 — SNOKE (J.E.) and BLOCH (K.). **Studies on the mechanism of action of glutathione synthetase.** *J. Biol. Chem.* (1955), 213, No. 2, 825-35.

1-06179 — SNOKE (J.E.). **Isolation and properties of yeast glutathione synthetase.** *J. Biol. Chem.* (1955), 213, No. 2, 813-24.

1-06180 — SOBEL (A.E.) and BURGER (M.). **Calcification. XIII. The influence of calcium phosphorus, and vitamin D on the removal of lead from blood and bone.** *J. Biol. Chem.* (1955), 212, No. 1, 105-10.

1-06181 — SOSA (A.), SOSA-BOURDOUIL (C.) et HARDY (C.). **Sur suelques constituants du** Lithospermum purpureocaeruleum L. *C. R. Acad. Sci., Paris*, (1955), 240, No. 14, 1570-3.

1-06182 — SPACKMAN (D.H.), SMITH (E.L.) and BROWN (D.M.). **Leucine aminopeptidase. IV. Isolation and properties of the enzyme from swine kindey** *J. Biol. Chem.* (1955), 212, No. 1, 255-70.

1-06183 — SPERRY (W.M.) and BRAND (F.C.). **The determination of total lipides in blood serum.** *J. Biol. Chem.* (1955), No. 1, 69-76.

1-06184 — STANGER (F.). **La structure de l'insuline.** *Bull. Soc Chem. Biol., Paris*, (1955), 37, No. 1, 23-36.

1-06185 — STAVROVSKAYA (V.I.). **In Russian.** (Chemical structure and parasitocidal activity. XV. Derivatives of quinoline with side-chain cyclic substituents attached to the nucleus in position 4 through a NH- group). *J. Gen. Chem., Moscow*, (1955), 25, (87)ff No. 2, 331-7.

1-06186 — STAVROVSKAYA (V.I.). **In Russian.** (Chemical structure and parasitocidal activity. XVI. 8-Arylamino-quinolines). *J. Gen. Chem., Moscow*, (1955), 25, (87), No. 2, 337-43.

1-06187 — STEVENS (C.M.), GIGGER (R.P.) and BOWNE (S.W.). **The cellular D-amino acids of** Bacillus brevis. *J. Biol. Chem.* (1955), 212, No. 1, 461-94.

1-06188 — STEVENS (C.M.) JOHNSON (C.A.) and WATANABE (R.). **Preparation of S-allyl-DL-homocysteine and related compounds and tests of their growth effects in rats.** *J. Biol. Chem.* (1955), 212, No. 1, 49-58.

1-06189 — STEPANENKO (B.N.), ZUBRILINA (G.V.) and KHAYUROVA (L.P.). **In Russian.** (The study of the metabolism of glycogen in the normal organism and in the organism ill with alloxan- diabetes with the help of radioactive carbon). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 3, 321-4.

1-06190 — STRECKER (H.), MELA (P.) and WAELSCH (H.). **Brain thioesterases.** *J. Biol. Chem.* (1955), 212, No. 1, 223-34.

1-06191 — STRITTMATTER (P.) and BALL (E.G.). **Formaldehyde dehydrogenase, a glutathione-dependent enzyme system.** *J. Biol. Chem.* (1955), No. 1, 445-62.

1-06192 — STETTN (M.R.) and STETTEN (D.J.). **Glycogen regeneration** in vivo. *J. Biol. Chem.* (1955), 213, No. 2, 723-32.

1-06193 — STOKES (W.M.), FISH (W.A.) and HICKEY (F.C.). **The fate of injected cholestenone in the intact rat.** *J. Biol. Chem.* (1955), No. 1, 325-8.

1-06194 — STOLL (A.) and HOFMANN (A.). **Canesine and the roots of** Rauwolfia canescens **L.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 820-1.

1-06195 — STOLL (A.), WARTBURG (A.) and RENZ (J.). **Isolation of α-peltatin glucoside from the rhizomes of** Podophyllum peltatum L. *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1710-1.

1-06196 — STROMINGER (J.L.) and LOWRY (O.H.). **The quantitative histochemistry of brain. IV. Lactic, malic, and glutamic dehydrogenases.** *J. Biol, Chem.* (1955), 213, No. 2, 635-46.

1-06197 — STEWART (D.M.). **Chages in the protein composition of muscles of the rat in hypertrophy and atrophy.** *Biochem, J.* (1955), 59, No. 4, 553-8.

1-06198 — SWELL (L.) and TREADWELL (C.R.). **Cholesterol esterases. VI. Relative specificity and activity of pancreatic cholesterol esterase.** *J. Biol. Chem.* (1955), 212, No. 1, 141-50.

1-06199 — TABOR (H.) and HAYAISHI (O.). **The excertion of imidazoleacetic acid riboside following the administration of imidazoleacetic acid or histamine to rats.** *J. Amer. Chem. Soc.* (1955), 77, No. 2, 505-6.

1-06200 — TALMAN (E.L.), GASE (J.D.), NEVE (R.A.), LABBE (R.F.) and ALDRICH (R.A.). **Porphyrin metabolism I.. Experimental porphyria in chick embryos.** *J. Biol. Chem.* (1955), 212, No. 2, 663-76.

1-06201 — TALALAY (P.), LOEWUS (F.A.) and VENNESLAND (B.). **The enzymatic transfer of hydrogen. IV. The reaction catalyzed by a B-hydroxysteroid dehydrogenase.** *J. Biol. Chem.* (1955), 212, No. 2, 801-10.

1-06202 — TAMM (I.) BUGHER (J.C.) and HORSFALL (F.L.). **Ultracentrifugation studies of a runiary mucoprotein which reacts with various viruses.** *J. Biol. Chem.* (1955), 212, No. 1, 125-34.

1-06203 — TANFORD (C.). **Evidence from titration curves on the "acyl shift" in proteins.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1912-3.

1-06204 — TARR (H.L.A.). **Fish muscle riboside hydrolases.** *Biochem, J.* (1955), 59, No. 3, 386-91.

1-06205 — TAUROG (A.), POTTER (G.D.) and CHAIKOFF (I.L.). **Conversion of inorganic I^{131} to organic I^{131} by cell-free preparations of thyroid tissue.** *J. Biol. Chem.* (1955), No. 1, 199-34.

1-06206 — TCHEN (T.T.) LOEWUS (F.A.) and VENNESLAND (B.). **The mechanism of enzymatic carbon dioxide fixation into oxalacetate.** *J. Biol. Chem.* (1955), 213, No. 2, 547-56.

1-06207 — TCHEN (T.T.) and VENNESLAND (B.). **Enzymatic carbon dioxide fixation into oxalacetate in wheat germ.** *J. Biol Chem.* (1955), 213, No. 2, 533-46.

1-06208 — TERNER (C.). **The metabolism of citric acid in th mary gland I. The effect of p-nitrophenol on the synthesis and oxidation of citric acid by homogenates of the mammary gland.** 88-95.

1-06209 — TERNER (C.). **The metabolism of citric acid in the mammary gland. 2. The effect of p-nitrophenol and of fluoride on the synthesis of citric acid in fluoroacetate-blocked homogenates.** *Biochem, J.* (1955), 60, No. 1, 95-101.

1-06210 — THOMAS (R.). **The isolation of ergosterol from Stacybotrys atra corda.** *Aust. J. Chem.* (1955), 8, 1, 142-3.

1-06211 — TIETZ (A.) and POPJAK (G.). **Biosynthesis of fatty acids in cell-free preparation. 3. Coenzyme A dependent reactions in a soluble enzyme system of mammary gland.** *Biochem, J.* (1955), 60, No. 1, 155-65.

1-06212 — TRACEY (M.V.). **Cellulase and chitinase in siol amoebae.** -*Nature, London*, (1955), 175, No. 4462, 815.

1-06213 — TROLL (W.) and SHERRY (S.). **The activation of human plasminogen by streptokinase.** *J. Biol. Chem.* (1955), 213, No. 2, 881-91.

1-06214 — TSUCHIYA (H.M.), HELIMAN (N.N.), KOEPSELL (H.J.), CORMAN (J.), STRINGER (C.S.), ROGOVIN (S.P.), BOGARD (M.O.) BRYANT (G.), FEGER (V.H.), HOFFMAN (C.A.), SENTI (F.R.) and JACKSON (R.W.). **Factors affecting molecular weight of enzymatically synthesized dextran.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2412-9.

1-06215 — TZITOVICH (I.K.). **In Russian.** (The biochemical foundation of the selestive astion of 2,4-dichlorophenoxyacetic acid on the dicotyledonic and herbaceous plants). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 587-90.

1-06216 — UJEJSKI (L.) and GLEGG (R.E.). **Carbohydrates in thyroglubulin and the lens capsule.** *Canad. J.* (1955), 33, No. 2, 199-201.

1-06217 — URIEL (J.) et SCHEIDEGGER (J.J.). **Electrophorése en gélose et coloration des constituants.** *Bull. Soc. Biol., Paris*, (1955), 37, No. 1, 165-8.

1-06218 — URITANI (I.) and MIYANO (M.). **Derivatives of caffeic acid in sweet potato attacked by black rot.** *Nature, London, London*, (1955), 175, No. 4462, 812.

1-06219 — VALLEE (B.L.) and HOCH (F.L.). **Yeat alcohol dehydrogenase, a zine metalloenzyme.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 821-2.

1-06220 — VANATTA (J.C.) and COX (C.C.). **Quantitative determination of urine sodium by means of ion exchange resins.** *J. Biol. Chem.* (1955), 212, No. 2, 599-606.

1-06221 — VEIS (A.) and CHOHEN (J.). **The degradation of collagen. II. The solubilization process.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2364-8.

1-06222 — VEIS (A.), EGGENBERGER (D.N.) and COHEN (J.). **The degradation of collagen. III. Characterization of soluble products.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2368-74.

1-06223 — VERLY (W.G.) and CATHEY (W.J.). **The influence of vitamin B12 on the biosynthesis of the methyl group of choline from methanol.** *J. Biol. Chem.* (1955), 213, No. 2, 621-4.

1-06224 — VISWANATHA (T.), PALLANSCH (M.J.) and LIENER (I.E.). **The inhibition of trypsin. II. The effect of synthetic anionic dtergents.** *J. Biol. Chem.* (1955), 212, No. 1, 301-10.

1-06225 — WINIO (W.W.). **Reactions of cytochrome oscidase.** *J. Biol. Chem.* (1955), 212, No. 2, 723-34.

1-06226 — WALKER (J.B.). **Canavanine and homoarginine as antimetabolites of arginine and lysine in yeast and algae.** *J. Biol. Chem.* (1955), 212, No. 1, 207-16.

1-06227 — WALKER (J.B.). **Homoarginine inhibition of Escherichia coli B.** *J. Biol. Chem.* (1955), 212, No. 2, 617-22.

1-06228 — WANG (C.H.), CHRISTENSEN (B.E.) and CHELDELIN (V.H.). **Conversion of pyruvic acid-2-C14 to some aliphatic monoamino acids in yeast.** *J. Biol. Chem.* (1955), No. 1, 365-72.

1-06229 — WANLESS (G.G.), KING (W.H.) and RITTER (J.J.). **Hydrocarbons in pyrethrum cuticle wax.** *Biochem, J.* (1955), 59, No. 4, 684-90.

1-06230 — WARD (G.B.) BROWN (G.M.) and SNELL (E.E.). **Phosphorylation of pantothenic acid and pantethine by an enzyme from Proteus morganii.** *J. Biol. Chem.* (1955), 213, No. 2, 869-76.

1-05231 — WEBB (J.M.) and LEVY (H.B.). **A sensitive method for the determination of deoxyribonucleic acid in tissues and microorganisms.** *J. Biol. Chem.* (1955), No. 1, 107-18.

1-06232 — WENFELD (H.), ROLL (P.M.) and BROWN (G.B.). **The utilization of nucleotides by the mammal. III. Isomeric purine nucleotides labeled with C14.** *J. Biol. Chem.* (1955), 213, No. 2, 523-30.

1-06233 — WEISBURGER (E.K.). **2-Hydroxy-3-acetylaminofluorene, a metabolite of 3-acetylaminofluorene in the rat.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1914-6.

1-06234 — WEISIGER (J.R.), HAUSMANN (W.) and CRAIG (L.C.). **On the partial hydrolysis of DNP-bacitracin A.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 731-6.

1-06235 — WEISS (S.B.) and MARX (W.). **The fate of radioctive cholesterol in mice with modified thyroid activities.** *J. Biol. Chem.* (1955), No. 1, 349-54.

1-06236 — WHALLEY (W.B.), ANDERSON (E.L.), DUGAN (F.), WILSON (J.W.) and ULLYOT (G.E.). **Reductive desulfurization of thiohydantions andthiobarbituric acids with raney nickel.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 745-9.

1-06237 — WHEATER (D.M.). **The characteristics of Lactobacillus asidophilus and Lactobacillus bulgaricus.** *J. Gen. Microbiol*, (1955), 12, No. 1, 123-32.

1-06238 — WHEATER (D.M.). **The characteristics of Lactobacillus plantarum, L. helveticus and L. sasei.** *J. Gen. Microbiol*, (1955), 12, No. 1, 133-19.

1-06239 — WHITE (W.F.) and LANDMANN (W.A.). **Studien on adrenocorticotropin. XI. A preliminary comparison of corticotropin-A with B-cortico-corticotropin.** *J. Amer. Chem. Soc.* (1955), 77, No. 6, 1711-2.

1-06240 — WHITFELD (P.R.), HEPPEL (L.A.) and MARKHAM (R.). **The enzymic hydrolysis of ribonucleoside-2:3 phosphates.** *Biochem, J.* (1955), 60, No. 1, 15-9.

1-06241 — WHITTAM (R.), BARTLEY (W.) and WEBER (G.). **The kinetics of the exchange of the phosphate groups of adeenosine triphosphate during oxidative phosphorylation.** *Biochem, J.* (1955), 59, No. 4, 590-9.

1-06242 — WINITZ (M.), BIRNBAUM (S.M.) and GREENSTEIN (J.P.). **Studies on diestereoisomeric x-amino acids and corresponding α-hydroxy acids II. Contribution of the asymmetric α-and B-carbon atoms to the molar rotations of the diastereomeric α-aminotricarballylic acids and corresponding isocitric acids.** *J. Amer. Chem. Soc.* (1955), 77, No. 3, 716-21.

1-06243 — WINSTEAD (M.B.) and HEINE (H.W.). **Identification of amines. I. N-(Arylaminomethyl)- phthalimides.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1913-4.

1-06244 — WICK (A.N.), DRURY (D.R.), NAKADA (H.I., BARNET (H.N.) and PORITA (T.N.). **Glucosamine and the action of insulin.** *J. Biol. Chem.* (1955), 213, No. 2, 907-11.

1-06245 — WILKINSON (J.F.), DUDMAN (W.F.) and ASPINALL (G.O.). **The extracellular polysaccharide of** Aerobacter aergenes **A 3 (SI) (Klebsiella type 54).** *Biochem, J.* (1955), 59, No. 3, 446-51.

1-06246 — WILLIAMS (W.J.), LITWIN (J.) and THORNE (C.B.). **Further studies on the biosynthesis of r-glutamyl peptides by transfer reactions.** *J. Biol. Chem.* (1955), 212, No. 1, 724-38.

1-06247 — WILLIAMSON (M.B.) and FROMM (H.J.). **The incorporation of sulfur amino acids into the proteins of regenerating wound tissue.** *J. Biol. Chem.* (1955), 212, No. 2, 705-12.

1-06248 — WILSON (I.B.). **Reactivation of human serum esterase inhibited by alkylphosphates.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2383-6.

1-06249 — WOOD (H.N.) and MACVICAR (R.). **Ammonia as an intermediate in nitrate reduction by** Bacillus subtilis. *J. Biol. Chem.* (1955), No. 1, 305-10.

1-06250 — WORDEN (A.N.), BUNYAN (J.), DAVIES (A. W.) and WATERHOUSE (C.E.). **The urinary excretion of vitamin A by the dog.** *Biochem, J.* (1955), 59, No. 3, 527-8.

1-06251 — WORK (E.), BIRNBAUM (S.M.), WINITZ (M.) (M.) and GREENSTEIN (J.P.). **Separation of three isomeric compenents of synthetic a, e-diamino-pimelid acid.** *J. Amer. Chem. Soc.* (1955), 77, No. 7, 1916-8.

1-06252 — WOTIZ (H.H.), RICHTERICH-VAN BAERLE (R.) and LEMON (H.M.). **Studies in steroid metabolism. III. Metabolism of testosterone by human serum.** *J. Biol. Chem.* (1955), 213 No. 2, 969-75.

1-06253 — WU (F.C.) and LASKOWSKI (M.). **Action of the naturally occurring trypsin inhibitors against chymotrypsins x and B.** *J. Biol. Chem.* (1955), 213, No. 2, 609-19.

1-06254 — WURTZ (B.) et GAGNIANT (D.). **Identification d'une combinaison azotée de l'acide glycuronique dans les cultures des ensilages.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1280-1.

1-06255 — WYNGAARDEN (J.B.), BETERSON (R.E.) and WOLFF (A.R.). **Physiologic disposit on of radiometabolites of hydrocortisone-4-C14 in the rat and guinea pig.** *J. Biol. Chem.* (1955), 212, No. 2, 963-12.

1-06256 — WYNGAARDEN (J.B.) and STANBURY (J.B.). **The formation of moniodotyrosine and an intermediate iod ne complex by thyroid homogenates.** *J. Biol. Chem.* (1955), 212, No. 1, 151-64.

1-06257 — YANG (J.T.) and FOSTER (J.F.). **Intrinsic viscosity and optical rotation of proteins.** *J. Amer. Chem. Soc.* (1955), 77, No. 9, 2374-8.

1-06258 — YANIV (H.) and GILVARG (C.). **Aromatic biosynthesis. XIV. 5-Dehydroshikimic reducatse.** *J. Biol. Chem.* (1955), 213, No. 2, 787-95.

1-06259 — ZUCHER (M.) and NASON (A.). **A pyridine nucleotidehydroxylamine reductase from** Neurospora. *J. Biol. Chem.* (1955), No. 1, 463-78.

1-06260 — ZAKRZEWSKI (S.F.) and NICHOL (C.A.). **The incorporation of formate C14 into** citrovorum **factor.** *J. Biol. Chem.* (1955), 213, No. 2, 697-704.

1-06261 — ZILVERSMIT (D.B.). **Meaning of turnover in biochem stry.** *Nature, London,* (1955), No. 4463, 863.

1-06262 — ZENTNER (H.). **A modified method of filter paper electrophoresis.** *Nature, London,* (1955), 175, No. 4465, 953.

E 6. INDUSTRIAL CHEMISTRY

1-06263 — AKHUMOV (E.I.) and SPIRO (N.S.). **In Russian.** (Calculation of the coefficients of the activity of water in two-component solutions). *Zh. Prikl. Khum., Leningr,* (1955), 28, No. 2, 205-8.

1-06264 — ALFIMOF (A.N.) and GULVAEV (A.P.). **In Russian.** (Study of the martensite transformation in steel). *J. Tech. Phys., Moscow,* (1955), 25, No. 4, 680-6.

1-06265 — ARNOLD (R.C.) and LEIN (A.P.). **Sulfur dioxide extraction of sulfur compounds and aromatics.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 234-9.

1-06266 — BARON (H.). **Standardization of wound textiles.** *Nature, London,* (1955), 175, No. 4461, 760-3.

1-06267 — BAYILS (R.L.), BEVAN (T.H.) and MALKIN (T.). **The synthesis of phosphatidic acids and monoalkyl phosphates.** *Chem. Ind.* (1955), No. 3, 67.

1-06268 — BEATON (F.M.), SPRING (F.S.), STEVENSON (R.) and STEWART (F.L.). **The partial synthesis of taraxerol.** *Chem. Ind.* (1955), No. 7, 35.

1-06269 — BEGEMAN (C.R.) and CRAMER (P.L.). **Thermal diffusion'separations of organic liquid mixtures.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 202-7.

1-06270 — BERENSON (G.S.), ROSEMAN (S.) and DORFMAN (A.). **A chromatographic method for the separation of acid mucopolysaccharides.** *Biochem, Biophys, Act$_a$.* (1955), 17, No. 1, 75,80.

1-062671 — BERGHEZAN (A.) et HERENGUEL (J.). **Sur l'élargissement des raies des diagrammes de Debye-Scherrer lors de la déformation plastiques des cristaux métalliques.** *C. R.-Acad. Sci., Paris,* (1955), 240, No. 12, 1343-5.

1-06272 — BHATTACHARYA (A.) and ROY (A.N.). **Equipment designdata flow of solid-Lquid supensions in vertica! columns.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 268-75.

1-06273 — BOGGS (J.H.) and SIBBITT (W.L.). **Thermal conductivity measurements of viscous liquids.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 289-73.

1-06275 — BOGOYAVELENSKY (P.S.) and MANNIDOVA (A.S.). **In Russian.** (The system NaCl-NaHC0$_3$-H$_2$O (Karlovy-Vary salt) at 25o and 38o). *Zh. Prikl. Khim., Leningr.* (1955 28, No. 3, 325-8.

1-06276 — BOLOTOV (B.A.), DOLGOV (B.N.) and KATKOVA (K.P.). **In Russian.** (The mechanism of formation of acetone and methylpropyl ketone from ethyl alcohol). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 4, 414-21.

1-06277 — BRICH (S.F.), CULLUM (T.V.), DEAN (R.A.) and DENYER (R.L.). **Sulfur compounds in kerosine boiling range of Middle East crudes.** *Industr. Engng, Chem. (Anal).* (1955), 47, No. 2, 240-9.

1-06278 — BULLOCK (K.). **The anticholinesterase activity of certain cytotoxic substances.** *Chem. Ind.* (1955), No. 7, 37-8.

1-06279 — COCKER (W.). **The chemistry of santonin.** *Chem. Ind.* (1955), No. 1, 19.

1-06280 — CAMPBELL (D.P.). **Signal flow diagrams for process evaluation.** *Industr, Engng. Chem. (Anal).* (1955), 47, No. 3, 409-13.

1-06281 — CAMPBELL (F.M.) and COOPER (R.L.). **The presence of 3:4-Benzyprene in snuff associated with a high incidence of cancer.** *Chem. Ind.* (1955), No. 3, 64-6.

1-06282 — CIPERA (F.D.) and NICHOLLS (R.V.V.). **Preparation of Benzyl esters of amino-acids.** *Chem. Ind.* (1955), No. 1, 16-7.

1-06283 — COTTINGHAM (P.L.), TIHEN (S.S.), BROWN (J.F.), KINDSCHY (E.O.), KELLEY (R.E.), SCHUNTER (W. E.) and MURPHY (W.I.R.). **Gilsonite as a source of synthetic fuels.** *Industr, Engng. Chem. (Anal),* (1955), 47, No. 2, 328-33.

1-06284 — CAVA (M.P.), WILSON (C.L.) and WILLIAMS (C.F.). **The synthesis of 2-methoxyfuran.** *Chem. Ind.* (1955), No. 1, 16.

1-06285 — COWGELL (R.W.). **Paper chromatographic separation of 2-phonosphoglyceric acid and 3-phosphoglyceric acid.** *Biochem. Biophys, Acta.* (1955), 16, No. 4, 614.

1-06286 — DANNENBERG (E.M.) and BOONSTRA (B.B.S.T.). **Performance of carbon blacks.** *Industr, Engng. Chem. (Anal),* (1955), 47, No. 2, 339-43.

1-06287 — DECOSTE (J.B.) and WALLDER (V.T.). **Weathering of polyvinyl chloride.** *Industr. Engng. Chem. (Anal),* (1955), 47, No. 2, 314-22.

1-06288 — DROZDOV (B.V.). **In Russian.** (The preparation of nickel powders by electrolysis). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 45-51.

1-06289 — DYAKOVA (M.K.) and SUROVTZEVA (V.V.). **In Russian.** (The influence of the fractional composition of solvents on humus and sapropelite coals). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 65-70.

1-06290 — EGAN (C.J) and LUTHY (R.V.). **Separation of. Xylenes.** *Industr, Engng. Chem. (Anal).* (1955), 47, No. 2, 250-52

1-06291 — EHRLICH (P.), TUCKER (T.W.) and FRANKLIN (P.J.). **Casting resins containing polystyrene.** *Industr, Engng. Chem.* (*Anal*). (1955), 47, No. 2, 322-8.

1-06292 — FEDOTIEV (N.P.) and BIBIDOV (N.N.). **In Russian.** (An electrolytic method of preparation of sodium stannate solutions). *Zh. Prikl. Khim., Leningr*, (1955), 28, No. 2, 156-65.

1-06293 — FITZGERLAD (F.S.). **Electrolysis of aqueous cyanide solutions.** *Chem. Ind.* (1965), No. 1, 16-17.

1-06294 — FRANCIS (A.W.). **Solvent extraction with liquid carbon dioxide.** *Industr. Engng. Chem.* (*Anal*). (1955), 47, No. 2, 230-4.

1-06295 — FRASER (R.D.B.) and ROGERS (G.E.). **The surface structure of wool and its components revealed by metal shadowing.** *Aust. J. Biol. Sci.* (1955), 8, No. 1, 129.

1-06296 — FREDRICK (J.F.) and MULLIGAN (F.J.). Jr. **Mechanism of action of branching enzyme from oscillatoria and the structure of branched dextrins.** *Physiol, Plant*, (1955), 8, No. 1, 74-83.

1-06297 — FURBY (N.W.). **Petroleum residua as sources of lubricating oil.** *Industr. Engng. Chem.* (*Anal*), (1955), 47, No. 3, 480-6.

1-06298 — GANE (R.). **Chemical engineering methods in the food industry some problems in the cooling and freezing of food-stuffs.** *Chem. Ind.* (1955), No. 4, -78-90.

1-06299 — GANZ (S.N.) and KRAVCHINSKAYA (S.B.). **In Russian.** (Velocity of absorption of nitrogen oxides by $Ca(OH)_2$ solutions in high velocity mechanical absorbing devices). *Zh. Prikl. Khem., Leningr*, (1955), 28, No. 2, 145-55.

1-06300 — GAVURINA (R.K.). **In Russian.** (The methods of calculation of the content of functional groups in high polymers). *Zh. Prikl. Khim., Leningr*, (1955), 28, No. 1, 81-6.

1-06301 — GELPERIN (N.I.) and VILSHAU (K.V.) **In Russian.** (Investigation of the fractionating efficiency of laboratory columns filled with porcelain rings). *Zh. Prikl. Khim., Leningr*, (1955), 28, No. 3, 254-61.

1-06302 — GERSTER (J.A.). **Advances in distillation separations.** *Industr. Engng. Chem.* (*Anal*). (1955), 47, No. 2, 253-8.

1-06303 — GLADEL (Y.L.) and DURANDET (Y.). **Equilibre liquide des systémes ternaires composés de deux hydrocarbures et d'un solvant.** *Rev. Inst. Franc. Pétrole*, (1955), 10, No. 4, 258-61.

1-06304 — GRAWIN (L.) and KELLY (E.W.)Jr. **Heat transfer design data-inclined falling film.** *Industr. Engng. Chem.* (*Anal*). (1955), 47, No. 3, 392-8.

1-06305 — GREENOUGH (G.B.) and SMITH (E.M.). **Deformation faults in cold-worked metals.** *Proc. Phys. Soc. Lond.B.* (1955), 68, No. 1, 51-2.

1-06306 — GROVER (P.K.), SHAH (G.D.) and SHAH (R.C.). **A new and conveinient method for the synthesis of hydroxyxathones.** *Chem. Ind.* (1955), No. 3, 62.

1-06307 — GUICHARD (M.G.). **Contribution à l'étude des acides organiques chez végétaux par chromatographie de partage sur papier.** *Rev. Gen. Biot.* (1955), No. 733, 117-23.

1-06308 — GURNANI (S.U.), KUMTA (U.S.) and SAHASRABUDHE (M.B.). **Influence of formic acid on the hydrolysis of tissue porteins. A new and rapid method of hydrolysis of porteins.** *Biochem, Biophys, Acta.* (1955), 16, No. 4, 553-7.

1-06309 — HANSEN (R.P.), SHORLAND (F.B.) and COOKE (N.F.). **The occurrence of n-undecanoic acid in butterfat.** *Chem. Ind.* (1955), No. 4, 92.

1-06310 — HARRAP (B.S.). **The molecular weitht at the air-water interface of some keratin derivatives extracted from wool.** *Aust. J. Biol. Sci.* (1955), 8, No. 1, 122-8.

1-06311 — HASS (R.H.) and SAUER (P.J.). **Design analysis of linear hydraulic analog.** *Industr. Engng. Chem.* (*Ananl*). (1955), 47, No. 3, 398-402.

1-06312 — HIHEN (S.S.), BRWON (J.F.), JENSEN (H.B.), TISOT (P.R.), MELTON (N.M.) and MURPHY (W.I.R.). **Entrained-solids of colorado oil shale. Product yields and properties.** *Industr. Engng. Chem.* (*Anal*). (1955), 47, No. 3, 464-8.

1-06313 — HOTTEN (B.W.) and BIRDSALL (D.H.). **Phase change in soap-oii dispersions.** *Industr. Engng. Chem.* (*Anal*). (1955), 47, No. 3, 447-51.

1-06314 — HOUPEURT (A.). **Eléments de mécanique des fluides dans les mileux poreux.** *Rev. Inst. Franc. Pétrole.* (1955), 10, No. 4, 247-57.

1-06315 — INGRAM (M), MOSSEL (D.A.A.) and DE LANGE (P.). **Factors, produced in sugar-acid browning reactions, which inhibit fermentation.** *Chem. Ind.* (1955), No. 3, 63-4.

1-06316 — ISAKOFF (S.E.). **Analysis of unsteady fluid flow using direct electrical analogs.** *Industr. Engng. Chem.* (*Anal*). (1955), 47, No. 3, 413-47.

1-06317 — JOHNSON)E.F.) and BAY (TH.). **Applications of pneumatic analog.** *Industr. Engng. Chem.* (*Anal*). (1955), 47, No. 3, 403-9.

1-06318 — ONES (A.L.). **Lubricating oil fractions produced by thermal diffusion.** *Industr. Engng. Chem.* (*Anal*). (1955), 47, No. 2, 212-5.

1-06319 — JONES (W.O.). **Dimers of cyclooctatetraene.** *Chem Ind.* (1955), No. 1, 16.

1-06320 — JUNGERS (J.G.) et BALACENNU (J.C.). **Cinétique chimique applique. XI. La catalyse hétérogène.** *Rev. Inst. Franc. Pétrole.* (1955), 10, No. 2, 128-50.

1-06321 — DEITH (F.W.) and HIXSON (A.N.). **Liquid-liquid extraction spray columns.** *Industr. Engng. Chem.* (*Anal*). (1955), 47, No. 2, 258-67.

1-06322 — KIEFFER (W.F.) and HORLOYD (R.A.). **Azeotropes of 2-butoxyethanol with alkyl benzenes.** *Industr. Engng. Chem.* (*Anal*). (1955), 47, No. 3, 457-8.

1-06323 — KNOX (R.). **Haemin and isoniazid resistance** of Mycobacterium tuberculosis. *J. Gen. Microbiol*, (1955), 12, N 2, 191-202.

1-06324 — KOSHELVA (G.N.). **In Russian.** (Preparation of p-xylenol blue). *Zh. Prikl. Khim., Leningr*, (1955), 28, No. 3, 307-10.

1-06325 — KURZ (P.F.). **Influence of group VI hydrides on hydrocabon flame speeds.** *Industr. Engng, Chem.* (*Anal*). (1955), 47, No. 2, 297-301.

1-06326 — KUZMINSKY (A.S.) and POPOVA (E.B.). **In Russian.** (Investigation of the thermal oxidation of butadiene-nitrile rubbers). *Zh. Prikl. Khim., Leningr.* (1955), 28, No. 3, 311-6.

1-06327 — KUZMINYKH (I.N.) and KOVAL (J.A.). **In Russian.** (The mass-exchange in the liquidaph se in bubbling through a sieve plate). *Z. Prikl. Khim., Leningr.* (1955), 28, No. 1, 21-9.

1-06328 — KUNETZOV (S.I.), SEREBRENNIKOVA (O.V.) and KAKOVSKAYA (K.V.). **In Russian.** (The reaction of bauxite and kaolin withcalcium hydroxide). *Zh. Prikl. Khim., Leningr*, (1955), 28, No. 3, 317-9.

1-06329 — LAIDLER (K.J.). **The influence of pH on the rates of enzyme reactions The nature of the enzyme-substrate interaction.** *Trans. Faraday, Soc.* (1955), 51, No. 5, 540-9.

1-06330 — LAIDLER (K.J.). **The influence of pH on the rates of enzyme reactions. III. Analysis of experimental results for various enzyme systems.** *Traus. Faraday, Soc.* (1955), 51, No. 5 550-60.

1-06331 — LENTZ (TH.H.), TERRY (D.E.) and WITTCOFF (H.). **Pure amines for the flotation of silica from rougher phosphate concentrate.** *Industr. Eqgng. Chem.* (*Anal*). (1955), 47, No. 3, 468-71.

1-06332 — LOISELEUR (J.) et CATINONT (L.). **Variations du nombre des groupes fonctionnels libres, au cours de la dénaturation du sérum sanguin par la chaleur.** *C. R. Acad. Sci., Paris*, (1955)' 240, No. 7, 817-9.

1-06333 — LOZOVOY (A.V.), SENYAVIN (S.A.) and VOLLEPSTEIN (A.B.). **In Russian.** (The activity of some hydrogenation catalysts). *Zh. Prikl. Khim., Leningr*, (1955), 28, No. 2, 175-84.

1-06334 — LYUBIMOVA (E.N.) and NIKITIN (N.I.). **In Russian.** (Use of activated cellulose in the synthesis of its lower substituted methyl and ethyl ethers). *Zh. Prikl. Khim., Leningr*, (1955), 28, No. 4, 402-6.

1-06335 — MACMILLAN (G.) GUPTA (A.B.) and ROY (A.). **A study on the isolation, properties and chemical composition of jute wax.** *J. Indian, Chem. Soc.* (1955), 32, No. 2,79-84.

1-06336 — MARKOWSKY (L.Ya) and MAZUR (Z.N.). **In Russian.** (The reactivity of carbonaceous materials in the reaction leading to the formation of carbon bisulphide from its elements and te catalytic action of the alkali salts). *Zh. Prikl. Khim., Leningr.* (1955), 28, No. 2, 123-34.

1-06337 — MARVEL (C.S.), ANDERSON (W.S.), WEIL (B.H.), RYDER (E.E.), INSKIP (H.P.), PASSER (M.), TAFT (W.K.). and LABBE (G.B.). **Polymers of butadiene with monomers containing nitrile carboxyl and nitro groups.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 344-5.

1-06338 — MILLS (R.F.N.). **Properties of a small bacteriophage and the action of some compounds on it.** *J. Gen. Microbiol,* (1955), 12, No. 2, 172-9.

1-06339 — MINIGAWA (T.). **Adaptation of yeast to copper. XI. Conditions for the action of a specific ribonucleate in increasing the copper resistance of yeast.** *Biochem. Biophys, Acta.* (1955), 16, No. 4, 539-52.

1-06340 — MOCHALOVA (L.A.) and KISHINEVSKY (M. Kh.). **In Russian.** (The kinetics of bubbling absorption). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 30-9.

1-06341 — MOKRUSHIN (S.G.), BORISIKHINA (V.I.) and POTASKUEV (K.G.). **In Russian.** (Influence of electrolytes on the formation and stability of foam from malt sprout). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 107-8.

1-06342 — MOKRUSHIN (S.G.) and BORISIKHINA (V.I.). **In Russian.** (Influence of laminar dispersing agents on the stability of foam). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 109-11.

1-06343 — MORTON (A.G.) and BROADBENT (D.). **The formation of extracellular nitrogen compounds by fungi.** *J. Gen. Microbiol,* (1955), 12, No. 2, 248-58.

1-06345 — MORTON (M.). **Molecular weights of emulsion polydienes.** *Indust. Engng. Chem. (Anal).* (1955), 47, No. 2, 333-9.

1-06346 — MUENDEL (C.H) and SELKE (W.A.). **Continuous ion exchange with an endless belt of phosphorylated cotton.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 3, 374-9.

1-06347 — MUKHLENOV (I.P.) and TUMARKINA (E.S.). **In Russian.** (The heat transfer in the foaming apparatus I). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 2, 135-44.

1-06348 — MUKHLENOV (I.P.) and TUMARKINA (E.S.). **In Russian.** (The heat tranfer in a foaming apparatus II.). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 4, 345-52.

1-06349 — NECHAEVA (N.B.). **In Russian.** (Investigation of the process of formation of methane, under the influence of microorganisms, from the gaseous-oil-bearing strata of the sesond Baku). *Microbiology, Moscow,* (1955), 24, No. 1, 3-13.

1-06350 — NEILSON (N.E.). **The aconitase of** Aspergillus niger. *Biochem. Biophys, Acta.* (1955), 17, No. 1, 139-40.

1-06351 — NELSON (L.). **Enzyme distribution in fragmented bull spermatozoa. II. Succininc dehydrogenase and cytochrome oxidase.** *Biochem, Biophys, Acta.* (1955), 16, No. 4, 494-501.

1-06352 — NEWTON (B.A.). **A fluorescent derivative of polymyxin:its preparation and use in studying the site of action of the antibiotic.** *J. Gen. Microbiol,* (1955), 12, No. 2, 226-36.

1-06353 — NOZOE (T.), MUKAI (T.), IKEGAMI (Y.) and TODA (T.). **Synthesis and properties of** 4-**hydroxytropone.** *Chem. Ind.* (1955), No. 3, 66-7.

1-06354 — ORDISH (G.). **The economics of crop protection.** *Chem. Ind.* (1955), No. 7, 24-30.

1-06355 — ORR (C.) Jr. **Thermal conductivity of granulated beds.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 356.

1-06356 — OSIPOW (L.), MARRA (D.), SNELL (C.T.) and SNELL (F.D.). **Detergency studies with sulfated tallow alcohols.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 3, 492-5.

1-06357 — OWEN (L.N.) and PETO (A.G.). **The trans-bicyclo (3:3:0) Octane system.** *Chem. Ind.* (1955), No. 3, 65-6.

1-06358 — PACKER (L.) and VISHNIAC (W.). **The specificity of a diphosphopyridine nucleotide-linked hydrogenase.** *Biochem, Biophys, Acta.* (1955), 17, No. 1, 153-4.

1-06359 — PEAT (S.), WHELAN (W.F.) and LAWLEY (H.G.). **Isolation of mannitol from laminarin.** *Chem. Ind.* (1955), No. 7, 35-6.

1-06360 — PECHKOWSKY (V.V.). **In Russian.** (Investigation of te thermal decomposition of manganese sulphate). *Zh. Prikl, Khim., Leningr,* (1955), 28, No. 3, 237-44.

1-06361 — PORT (W.S.), JORDAN (E.F.), PALM (W.E.), WITNAUER (L.P.), HANSEN (J.E)a nd SWERN (D.). **Polymerizable erivatives of long-chain fatty acids.** *Industr. Engng. Chem. (Anal),* (1955), 47, N. 3, 47-80.

1-06362 — POZIN (M.E.) and VOSOLOSOBE (Ya. Ya). **I Russian.** (Oxidation of sulphur wih a mixture of nitric and sulphuric acids). *Zh. Prikl. Khim., Lningr,* (1955), 28, No. 4, 428 31.

1-06363 — POZIN M.E.) ad VOSOLSOBE (Ya. Ya.). **In Russian.** (The oxidation of sulphur with nitrose). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 3, 229-36.

1-06364 — PRENGLE (R.S.) and ROTHFUS (R.R.). **Fluid mechanics studies-transition phenomena in pipes and annula cross sections.** *Industr. Engng. Chem. (Anl).* (1955), 47, No. 4, 379-86.

1-06365 — REED (T.M.) III. and FENSKE (M.R.). **Effects of of agitation on gas fluidization of snlids.** *Industr. Engng. Cem. (Anal).* (1955), 47, No. 2, 275-82.

1-06366 — REGAK (N. Ya.) and SMIRNOV (N.I.). **In Russian.** (Adsorption of unsaturated gases on activated charcoal). *Zh. Prikl. Khim., Lening,* (1955), 28, No. 4, 433-6.

1-06367 — REICH (E.) and LEHNINGER (A.L.).**Conversion of cholesterol to corticosteroids in adrenal homogenates.** *Biochem. Biophys. Acta,* (1955), 17, No. 1, 136-7.

1-06368 — REMAN (G.H.). **Effect of gas and solid mixing in fluidized beds on chemical reactions.** *Chem. Ind.* (1955), No. 3, 46-51

1-06369 — RJEKHIN (V.P.). **In Russian.** (Investigation of the change of the propertis of crystalline gossypol on heating in an atmosphere of air, water-vapour and carbondioxide). *Zj. Prikl. Khim., Lening,* (1955), 28, No. 2, 193-200.

1-06370 — SALAMONE (J.J.) and NEWMAN (M.). **Heat transfer design characteristics-water suspensions of solids.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 283-9.

1-06371 — SANDERS (H.J.) EDMUNDS (R.T.) and STILLMAN (W.B.). **Nitrofurans.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 3, -358-67.

1-06372 — SMITH (D.C.C.). **The preparationf of D-ribose and 2-deoxy-D-ribose from glucose.** *Chem. Ind.* (1955), No. 4, 92-3.

1-06373 — SOHNS (H.W.), JUKKOLA (E.E.), COX (R.J.), BRANTLEY (F.E.), COLLINS (W.G.) and MURPHY (W.I.R). **Entrained-solids retorting of colorado oil shale. Equipment and operation.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 3, 461-4.

1-06374 — SOUKIASSIAN (L.). **Etat actuel du manographe strobo-cathodique I.F.P.** *Rev. Inst. Franc. Pétrole.* (1955), 10, No. 3, 170-80.

1-06375 — SPRAGUE (R.W.) and KAUFMAN (E.E.). **Densities of ternary system nitric acid-dinitrogen tetroxide water.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 3, 458-60.

1-06376 — SPRAUL (J.R.). **Rotary air dryer operation.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 3, 368-73.

1-06377 — SPRUNG (M.M.), GUENTHER (F.O.) and GLADSTONE (M.T.). **Cured polyvinyl formal sheet.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 305-14.

1-06378 — SKINNER (D.A.). **Selective solvents for aromatic hydrocarbons.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 222-19.

1-06379 — STRAKWEAT ER (H.W.) Jr., ADICOFF (A.) and EIRICH (F.R.). **Heat-lesistant allyl resins.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 302-5.

1-06380 — hTRELETZ (Kh. L.) and DESYANTINKOV (O.G.). **In Russian.** (Density of the molten salts of isoconcentration composition (10 wt.% MgC12) of the systsm MgC12-CaC12-KC1 -NaC1). *Zh. Prikl. Khim., Leningr,* (1955), 28, -No. 2, 201-5.

1-06381 — STRELETZ (Kh. L.) and DESTANTINKOV (O.G.). **In Russian.** (The surfass tenion of molten salts of isoconsetration compostition (10wt.% $MgCl_2$) of the system $MgCl_2$-$CaCl_2$-KCl-NaC1). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 40-4

1-06382 — STROMINGER (J.L.). **Enzymic synthesis of guanosine and cytidine triphosphates:a note on the nucletode specificity of the pyruvate phosphokniase reaction.** *Biochem, Biophys. Acta.* (1955), 16, No. 4, 616.

1-06383 — SULIVAN)L.J.), RUPPEL (TH.C.) and WILLINGHAM (C.B.). **Rotary and packed thermal diffusion fractionating columns for liquids.** *Industr. Engng. Chem. (Anal).* (1955), 47 No. 2, 208-11.

1-06384 — SVETLIK (J.F.), RAILSBACK (H.E.) BAIRD (C. C.), and LOUTHAN (R.P.). **N-Substituted alkylsulphenyl dithiocarbamates and vulcanization accelerators.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 352-6.

1-06385 — SWERN (D.). **Urea and thiourea complexes in separating organic compounds.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 2, 216-21.

1-06386 — TAFT (W.K.) and DUKE (J.). **Effect of milling on branching and distribution of hot GR-S.** *Industr. Engng. Chem. Chem. (Anal).* (1955), 47, No. 3, 496-500.

1-06387 — TOROPOV (N.A.) and SYCHEV (M.M.). **In Russian.** (Investigation of the stability of the fibres of mineral cotton to temperature). *Zh. Prikl. Khim., Leningr,* (1955), -28, No. 3, 322-5.

106388 — TZIPKINA (O.-Ya.). **In Russian.** (The study of the influence of vacuum on the efficiency of the separation of some polyyclic ompounds of coal-tar by rectification). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 2, 185-92.

1-06389 — USHAKOV (S.N.) and LAVRENTIEVA (E.M.). **In Russian.** (Synthesis of benzyl ethers of polyvinyl alcohol). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 4, 407-13.

1-06390 — VICKERY (R.C.). **The lanthanon content of South Pacific phsphorites.** *Aust. J. Chem.* (1955), 8, No. 1, 145-8.

1-06391 — VINOGRADOV (G.V.), NECHITAILO (N.A.) SI NITZYN (V.V.) and ALEKASASHIN (V.I.). **In Russian.** (Investigation of the structre of plastic films in the electron microscope). *Zh. Prikl. Khim., Leningr,* (1955), 28, No. 1, 52-64.

1-06392 — WARRICK (E.L.) and LAUTERBUR (P.C.) **Fil ler phenomena in silicone rubber.** *Indutr. Engn. Chem. (Anal-* (1955), 47, No. 3, 486-91.

1-06393 — WEBER (J.H.). **Vapor-liquid equilibria for system methylcylohexqne toluene at subatmospheric pressures.** *Industr. Engng. Chem. (Anal).* (1955), 47, No. 3, 454-7.

1-06394 — WESTWATR (J.W.). **Liquid phase equilibria in system water-tert-butyl alcohol-tert -butyl hypochlorite.** *Indusr. Engng. Chem. (Anal).*(1955), 47, No. 3, 451-4.

1-06395 — WHATLEY (F.R.), ALLEN (M.B.) ad ARNON (D.I.). **Vitamin K as a cofactor of photosynthetic phosphorylation.** *Biochem, Biophys, Acta.* (1955), 16, No. 4, 605-6.

1-06396 — WINDING (CC.), TOPPER (L.) and BAUS (R.R.). **Metal-film resistance thermometers for measuring surface temperatures.** *Industr. Engng. Chem. (nal).* (1955), 47, No. 3, 386-9.

1-06397 — WRIGHT (H.B.) and WALKER (T.K.. **Synthesis of melibiose by an acetobacter species in a lactate-buffered glucoe medium.** *Chem. Ind.* (1955), No. 1, 17.

1-06398 — YANG (C.P.) and WINKLE (M.V.). **Vapor-liquid equilibria at subatmospheric pressures.** *Industr. Engn. Chem. (Anal).* (1955), 47, No. 2, 293-7.

E 7. METALLURGY and METALLOGRAPHY

1-06399 — ABAKULINA (E.I.) and ZAVARITZKY (N.V.). **In Rusian.** (The obtention of a metastable modification of thalium). *J. Exp. Theor, Phys.* (1955), 28, No. 2, 250.

1-06400 — ARTHUR (G.). **Porosity and permeability changes during the sintering of copper powder.** *J. Inst. Met.* (1955), *March,* 329-36.

1-06401 — AYAZIAN (E.O.). **In Russian.** (The potential of a zero charge and the mechanism of the action of inhibitors of the acid corrosion of iron). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 473-6.

1-06402 — BALESDENT(D.). **Détermination des activités du civre et de l'or dans leurs alliages.** *C. R.-Acad. Sci., Paris,* (1955), 240, No. 7, 760-2.

1-06403 — BIGOT (R.) et FAIVRE (.). **Etude quantitative de la cinétique des refroidissement d'échantillons de nickel au cours de leur hypertrempe dans différents liquides.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 774-5.

1-06404 — BIRKS (L.S.) and BAILEY (E.F.). **Effects of tensile stress on the austenite to ferrite transformation in eutectoid steel.** *J. Metals,* (1955), 7, No. 1, 179-82.

1-06405 — BOOTH (C.) and ROWLINSON (J.S.). **The influence of lattice vibrationson the order-disorder transitins of alloys.** *Trans. Faraday, Soc.* (1955), 51, No. 5, 463-7.

1-06406 — CAHUDHURI (A.R.), CHANG (H.C.) and GRANT (N.J.). **Creep deformation of magnesium at edevated temperatures by nonbasal slip.** *J. Metals.* (1955), 7, No. 5, 682-8.

1-06407 — CAMPBELL (D.F.). **Large electric furnaces.** *J. Iron. St. Inst.* (1955), 180, N. 2, 107-112.

1-06408 — CHAMPION (F.A.). **The intractions of static stres and corrosion with aluminium alloys.** *J. Inst. Met.* (1955), *April* 385-92.

1-06409 — CHIPMAN (J.). **Atomic interaction in molten alloy stels.** *J. Iron. St. Inst.* (1955), 180, No. 2, 97-106.

1-06410 — CHUBB (W.). **Contribution of erystal structure to the hardness of metals.** *J. Metals.* (1955), 7, No. 1, 189- 2.

1-06411 — CLAREBROUGH (L.M.), HARGREAVES (M..), HEAD (A.K.) and WEST (G.W.). **Energy stroed during fatigue of copper.** *J. Metls.* (1955), 7, No. 1, 99-100.

1-06412 — CLARK (A.P.) and CORNFORTH (S.). **The disign and construction of lackenby steelworks.** *J. Iron. St. Inst.* (1955), 180, No. 2, 180-8.

1-06413 — CLAYTON-CAE (J.), TAYLOR (R.J.) an INESON (E.). **Reproducibility of wohler-type fatigue tests.** *J. Iron. St. Inst.* (1955), 10, No. 2, 161-74.

1-06414 — DALLAPICOLA G.). **Examen comparatif des différents systémes de deformation à chaud.** *Métallurgie* (1955), 78, -No. 2, 129-33.

1-06415 — DAURAT (J.). **Controle industriel par les ultra-sons.** *Métalurgie* (155), 87, No. 1, 31-4.

1-06416 — FARRAR (.) andMRGOLIN (H.). **Titanium-lead system.** *J. Metals.* (1955), 7, No. 1, 101-4.

1-06417 — FORSYTH (J.E.) and STUBBINGTON (C.A.S.). **A slip-band exudation effect observed in pure aluminium.** *Nature, London,* (1955), No. 4461, 767.

1-06418 — FORSYTH (P.J.E.) and STUBBINGTON (C.A.). **The slip-band extrusion effect observed in some aluminium alloys subjected to cyclic stresses.** *J. Inst. Met.* (1955), *April,* (395-9.

1-06419 — FRITH (P.H.). **Fatigue tests on rolled alloy stels made in electric and open-hearth furnaces.** *J. Iron. St. Inst.* (1955). 180, No. 1, 26-33.

1-06420 — GAEV (I.S.) and POLOVNIKOV (V.V.). **In Russian.** (Influence of the different elements on the grain-size of the austenite of medium carbon steel). *J. Tech. Phys., Moswow,* (1955, 25, No. 3, 529-33.

1-06421 — GARIBALDI (J.A.) and NEILANDS (J.B.). **Isolation and properties of ferrichrome A.** *J. Amer. hem. Soc.* (1955), 77, No. 9, 2429-30.

1-06422 — GIEDROYC (V.). **Removal of sulphur during iron-ore sintering. I. Laboratory studies of the kinetics of sulphide and sulphate decomposition.** *J. Iron. St. Inst.* (1955), 180, No. 2, 129-54.

1-06423 — GRAIGHEAD (C.M.), CAWTHORNE (E.W.) ad JAFFEE (R.I.). **Solution rate of solid aluminum in molten Al-Si alloy.** *J. Metals.* (1955), 7, No.-1, 81-7.

1-06424 — GREEN (J.I.T.) and CONWAY (A.). **Bearing cartridge bolts for roller tables.** *J. Iron. St. Inst.* (1955), 18, No. 1, 34-9.

1-06425 — GREINER (E.S.) and BREIDT (P.). **Melting point of germanium and the constituion of some Ge-Ga alloys.** *J.-Metals.* (1955), 7, No. 1, 187-8.

1-06426 — GRONLUND (F.) et BENARD (J.). **Sur un processus de germination dans l'oxydation du cuivre sous la basse pression.** *C. R. Acad. Sci., Paris,* (1955),-240, No. 6, 624-5.

1-06427 — GRUSIN (P.L.), KOSTOGONOV (V.G.) and PLATONOV. (P.A.). **In Russian.** (Use of the carbon isotope C^{14} for the study of the diffusion of carbon in steel). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1069-72.

1-06428 — GUEDRAS (M.). **Le petit convertisseur en aciérie de moulage.** *Métallurgie* (1955), 87, No. 2, 103-4.

1-06429 — HARDY (H.K.). **Aluminium-copper-cadium sheet alloys.** *J. Inst. Met.* (1955), *March,* 337-46.

1-06430 — HAVEN W(A.). **The role of iron-Ore beneficiation, The solution of the taconite problem in the U.S.A. J.** *Iron. St. Inst.* (1955, 180, No. 2, 144-68.

1-06431 — HAYNES (R.). **Some observations on isothermal transformations of eutectoid aluminium bronzes below their Ms temperatures.***J. Inst. Met.* (195), *March,* 357-8.

1-06432 — HELLEN (N). **A short history of iron and steel making in Fnland.** *J. Iron. St. Inst.* (1955), 180, No. 1, 18-20.

1-06433 — HIBBARD (W.R.), and HART (E.W.). **Dispersion hardening of copper-chromium alloys.** *J. Metals.* (1955), 7, No. 1, 200-2.'

1-06434 — HIL (R.B.) and AXON (H.J.). **Lattice spacings of the aluminium-rich solid solution containing magnesium and silicon.** *J. Ist. Met.* (1955), *Mrch*, 354-6.

1-06435 — HILTY (D.C.), BASSBACH (H.P.) and CRAFTS (W.). **Observations of stainless steel melting practice.** *J. Iron. St. Ins.* (1955), 80, No. 2, 16-39.

1-06436 — HOLDEN (F.C.), WATTS (A.A.), OGDEN (H.R.) and JAFFEE (R.I.). **Heat treatmet ᵃnd mechanical properties of Ti-Cu alloys.** *J. Metals.* (1955), 7, No. 1, 117-25.

1-06437 — HOOD (T.W.). **Practical aspects of the cold-rolling of narrow steel strip.** *J. Iron. St. Inst.* (1955), 180, No. 2, 189205.

1-06438 — HORNE (G.T.) and MEHL (R.F.). **Mobilities in piffusion in alpha brass.** *J. Metals.* (1955), 7, No. 1, 88-99.

1-06439 — HUNDY (B.B.) and SINGER (A.R.E.). **Inhomogeneous deformation in rolling and wire-drawing.** *J. Inst. Met.* (1955') *May*, 401-7.

1-06440 — JONES (B.) and OWEN-BARNETT (R.A.). **The strain-ageing of pure iron. Ageing of pure iron after temper-rolling and tensile-straining.** *J. Iron. St. Inst.* (1955), 180, No. 1, 20-3.

1-06441 — JASSO (E.). **Interprétation de la fragilité ị 475 C des alliages ferchrome.** *C. R. Acad. Sci., Paris*, (1955), 240, N o.7, 776-8.

1-06442 — KAZARNOVSKY (D.S.). **In Russian.** (The diffusion of arsenic in steel). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1073-5.

1-06443 — KJELLBERG (B.). **Le soudage à l'arc en Scandinavie.** *Métallurgie* (1955), 76, No. 1, 37-43.

1-06444 — KOCHERJINSKY (Yu. A.). **In Russian.** (New facts on the transformation of the perlite of carbon steel into austenite by electrical heating). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1077-8.

1-06445 — KRCHMAR (S.I.). **In Russian.** (The polarization mechanism of smoolhing in the electrochemical polishing of metals). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 481-4.

1-06446 — KRISHTAL (M.A.). **In Russian.** (Method of determination of the coefficient of self-diffusion of iron in austenite high alloy). *J. Tech. Phys., Moscow*, (1955), 25, No. 1, 144-8.

1-06447 — LAPLANCHE (H.). **Etudes des aciers à durcissement structural.** *Métallurgie* (1955), 87, No. 2, 107-15.

1-06448 — LIGER (J.). **Préparation superficielle des métaux ferreux.** *Métallurgie* (1955), 87, No. 2, 119-22.

1-06449 — LEECH (E.A., GREGORY (P.) and EBORALL (R.). **A hot impact tensiletest and its relation to hot working properties.** *J. Inst. Met.* (1955), *March*, 347-53.

1-06450 — LENEL (F.V.). **Resistance sintering under pressure.** *J. Metals.* (1955), 7, No. 1, 158-67.

1-06451 — LEVIN (A.I.) and FALLICHEVA (A.I.). **In Russian.** (Study of cathode processes during galvanic chrome-plating). *J. Phys. Chem., Moscow*, (1955), 29, No. 1, 95-104.

1-06452 — LUZINA (G.S.). **In Russian.** (The use of additional agents in the etching of tin-plate). *Zh. Prikl. Khim., Leningr*, (1955), 28, No. 3, 291-8.

1-06453 — MARTIN (J.W.) and SMITH (G.C.). **A preliminary note on the creep properties of internally oxidized copper alloys.** *J. Inst. Met.* (1955), *May*, 417-20.

1-06454 — NEVITT (M.V.) and BECK (P.A.). **Curie temperatures of binary and ternary sigma phases.** *J. Metals.* (1955), 7, No. 5, 669-74.

1-06455 — ODGEN (H.R.), HOLDEN (F.C.) and JAFFEE (R.I.). **Effect of alpha solutes on the heat-treatment response of Ti-Mn alloys.** *J. Metals.* (1955), 7, No.1, 105-12.

1-06456 — OGDEN (H.R.), JAFFEE (R.I.) and HOLDEN (F. C.). **Structure and properties of Ti-C alloys.** *J. Metals.* (1955), 7, No. 1, 73-80.

1-06457 — PASCAL J.). **Les fontes résistantes exemptes d'éléments spéciaux.** *-Métallurg e* (1955), 87, No. 2, 95-101.

1-06458 — PERRYMAN (E.C.W.) and GOODWIN (R.J.). **The effect of zironium and titanium on the intercrystalline-cracking tendency of beta-brasses.** *J. Inst. Met.* (155), *April*, 378-82. No. 1, 5-9.

1-06459 — PERRYMAN (E.C.W.). **Intercrystalline fracture of of betabrasses containing aluminium.** *J. Inst. Met.* (1955), *April*, 369-77.

1-06460 — PEYRE (J.). **Le fer lorrain.** *Métallugie* (1955), 87, No. 1, 5-9.

1-06461 — PHILIBERT (J.) and CRUSSARD (C.). **Kinetics of the martensite transformation in a hyper-eutection.** *J. Iron. St. Inst.* (1955), -180, No. 1, 39-50.

1-06462 — PINIK (E.M.). **I Russian.** Isothermal transformation of ferrite inot high austenite-ferrite alloys). *J. Tech.-Phys.,-Moscow,*-(1955), 25, No. 1, 135-43.

1-06463 — OMEAR (I..) and HARDY (H.K.). **Specific-heat measurements on aluminium-4% copper and aluminium 4% Copper-tin alloys.** *J. Inst. Met.* (1955), *April*, 393-4.

1-06464 — PRANATIS (A.L.) and POUND (G.M.). **Viscous flow of copper at high temperatures.-***J. Metals.* (1955) 7, No. 5, 664-8.

1-06465 — RAYNES (B.C.), THELLMANN (E.L.), STEINBERG (M.A.) and WAINER (E.). **The extractive metallurgy of zirconiun by the electrolysis of fused salts. III. Expanded scale process development of the electrolytic production of zirconium from K_2ZrF_6.** *J. Electrochem,-Soc.* (1955), 102, No. 3, 137-44.

1-06466 — REITER (S.F.) and HIBBARD (W.R.). **High temperatemperature properties of iron-rich Fe-Mo alloys.** *J. Metals.* (1955), 7, No. 5, 655-63.

1-06467 — RICHARDS (H.). **Wire-drawing machines for steel wire.** *J. Iron. St. Inst.* (1955), 180, No. 1, 60-5.

1-06468 — ROSSI-LANDI (G.). **A propos de inhibiteurs et accélérateurs de décapage.** *Métallurgie* (1955), 87, No. 2, 125-7.

1-06469 — ROULLEAU (J.B.). **Le marché des métaux non-ferreux.** *Métallurgie* (1955) 87, No. 1, 57-58.

1-06470 — ROULLEAU (J.B.). **Le marché des métaux non-ferreux.** *Métallurgie* (1955), 87, No. 2, 139-4.

1-06471 — SAMUELS (L.E.). **Matallographic polishing of cast iron. A simplified method using diamond abrasives.** *J. Iron. St. Inst.* (1955), 180, No. 1, 23-6.

1-06472 — SAMUELS -(L.E.). **The metallographic detection of deformation in opper and alpha-brasse.** *J. Inst. Met.* (1955). *March*, 329-68.

1-06473 — SAVAGE (L.H.W.). **Progress review of casting bay bay and soaking pit partce.** *Iron. Steel, London*, (1955), 2, No. 1, 43-8

1-06474 — SEMILETOV (S.A.) and PINSKER (Z.G.). **In Russian.** (Electronographical study of the system of alloys Bi-Se). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, a079-82.

1-06475 — SHANAHAN (C.E.A.). **Rate of edsulphurization of carbon-saturated iron by balst-furnace slags.** *J. Iron. St. Inst.* (1955), 180, No. 2, 140-4.

1-06476 — SHIH (C.H.), AVERBACH (B.L.) and COHEN (M.). **Some characteristics of the isothermal martensitic trasformation.** *J. Meta.* (155), 7, No. 1, 183-7.

1-06477 — SIMS (C.T.), CRAIGHEAD (C.M.) and JAFFEE (R.I.). **Physical and mechanical properties of rhenium.** *J. Metals.* (1955), 7, No. 1, 168-79.

1-06478 — SIMOCOE (C.R.), ELSEA (A.R.) and MANNING (G.K.). **Study of the effect of boron on the decomposition of austenite.** *J. Mtals*, (1955), 7, No. 1, 193-20.

1-06479 — SMALLMAN (R.E.). **Deformation and anneling textures in thorium.** *J. Inst. Met.* (1955), *May*, 408-16.

1-06480 — SMITH (D.S.). **The system uranium-tungsten.** *J. Inst. Met.* (1955), *April*,383-4.

1-06481 — SMITH (M.D.) and HONEYCOMBE (W.K.). **The sintering, fabrication, and properties of thorium.** *J. Inst. Met.* (1955), *May*, 421-6.

1-06482 — SOLOSHKO (F.P.) and EPIFANOV (G.I.). **In Russian.** (The efficiency of the action of liquid media in the free planning of lead-antimony alloys). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 491-3.

1-06483 — SPERRY (P.R.). **Metallographic study of equilibrium relationships in 3S aluminum alloy.** *J. Metals.* (15), 7, No. 1, 145-5.

1-06484 — STEIN (C.) and GRANT (N..). **Chromium-rich protion of the chromium-nickel phase diagram.** *J. Metals.* (1955) 7, No. 1, 127-34.

1-06485 — STWART (E.W.), GANARD (G.P.), and LIBSCH (J.F.). **Influnce of additives in the production of high coercivity ultra-fine iron powder.** *J. Metals.* (1955), 7, No. 1, 152-7.

1-06486 — THOMAS (W.R.) and LEAK (G.M.). **The strain agein of alpha-iron.** *J. Iron. St. Inst.* (1955), 180, No. 2, 155-60.

1-06487 — THOMPSON (F.C.). **Effect of inclusions on steel.** *Nature, London,* (1955), 175, No. 4461, 760.

1-06488 — TOWERS (H.). **Refractories.** *Iron. Steel. London,* (1955), 28, No. 1, 55-60.

1-06489 — TURKDOGAN E.T.) and LEAKE (L.E.). **The thermodynamics of carbon dissolved in iron alloys.** *J. Iron. St. Inst.* (1955), 17,No. 1, 39-43.

1-06490 — TZAREVA (Yu. S.), SOLOKHINA (V.G.), KUDRYAVTZEV (N.T.) and BAGRAMIAN (A.T.). **In Russian.** (Influence of surface active substances on the mechanical properties of electrolytic deposits of copper). *J. Phys Chem.., Moscow,* (1955), 29, No. 1, 166-73.

106491 — VASILIEV (L.I.) and PAKHRYAEV (N.E.). **In Russian.** (Influence of annealing teperature and the degre of deformation on the properties of aluminium). *J. Teach. Phys., Moscow,* (1955), 25, No. 4, 691-5.

1-06492 — VISWANATHAN (A.). **Sur la transformation eutectoide d'un alliage de cuivre à 6% de beryllium.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 626-8.

1-06493 — WACHE (X.). **Allongement discontinu des austénites soumises à l'essai de traction ordinaire à hautes températures.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1892-4.

1-06494 — WALTER (H.M.). **Hot rolling with the planetary mill.** *Iron. Steel, Lndon,* (1955), 28, No. 2, 68-9.

1-06495 — WASHBURN (J.). **Effect of the structure of dislocation boundaries on yield strength.** *J. Metals.* (1955), 7, No. 5, 675-81.

1-06496 — WATSON (A.W.W.). **Training in the iron and steel industry. J.** *Iron. St. Inst.* (1955), 180, No. 2, 169-75.

1-06497 — WEEKS (J.L.). **Thermal conductivity of uranium and several uranium alloys.** *J. Metals.* (1955), 7, No. 1, 192.

1-06498 — WILCOCK (R.). **The operation of a 60-ton Arc furnace at samuel fox and Co., Ltd.** *J. Iron. St. Inst.* (1955), 180, No. 2, 113-5.

1-06499 — WILMS (G.R.). **Some observations on the creep of prestrained aluminium.** *J. Inst. Met.* (1955), *May,* 427-32.

1-06500 — WISTREICH (J.G.). **Cold working of metals.** *J. Iron. Inst.* (1955), 180, No. 1, 51-60.

1-06501 — WUSATOWSKI (Z.). **Hot rolling.** *Iron. Steel, London,* (1955), 28, No. 1, 49-54.

1-06502 — ZEERLEDER (A.). **Attempts to imporve aluminium reduction since Heroult and Hall. Twenty-fith Autumn lecture.** *J. Inst. Met.* (1955), *March,* 321-8.

F. Geological Sciences

1–06558 — AGRAWAL (S.K.). **Sur la stratigraphie du jurassique de Kutch (Inde).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1790-2.

1–06559 — ALEXANIAN (C.). **Analyse quantitative des minéraux dans les roches par la diffraction des rayons X.** *Rev. Inst. Fran. Pétrole,* (1955), 10, No. 2, 115-27.

1–06560 — ALEXANDRE (J.). **Le modelé du fond des vallées secondairtes de l'Ardenne au cours du Pléistocène.** *Soc. Géol. Belg.* (1955), 79, No. 7,335-52.

1–06561 — ALIMEN (H.). **Découverte de nouveaux dépots et d'ındustries préhistoriques, en couche dans les alluvions quaternaires de la Saoura (Sahara occidental).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1652-4.

1–06562 — ALIMEN (H.) et FENENT (D.). **Granulométrie de sables quaternaires de la région Saoura-Ougarta (Sahara Occidental).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1231-3.

1–06563 — AMIRKHANOV (Kh. I.), GURVIH (I.G., SHANIN (L.L.) and SARDAROV (S.S.). **In Russian.** (A mass-spectrometrical method of determination of the amount of. radiogenic argon in geological formations for the estimation of their absolute age). *J. Tech. Phys., Moscow,* (1955), 25, No , 558-61.

1–06564 — ARAMBOURG (C) et BIBERSON (P.). **Découverte de vestiges humains acheuléens dansla carrière de Sidi Abel-Rahmann, près Casablanca.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1661-2.

1–06565 — AZAROFF (L.V.) and SUERGER (M.J.).**Refinement of the structure of cubanite, Cu Fe_2S.** *Amer. Min.* (1955), 40, No. 34, 213-25.

1–06566 — BAECKEROOT (G.). **Identification de périodes périglaciaires distinctes, dans le Castrais.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 635-7.

1–06567 — BAKER (J.W.). **Pre-cambrian rocks in Wexford.** *Geol. Mag.* (1955), 92, No. 1, 63-8.

1–06568 — BATTEY (M.H.). **Alkali metasomatism and the petrology of some ketatophyres.** *Geol. Mag.* (1955), 92, No. 104-26.

1–06569 — BEAUJEU-GARNIER (J.). **Sur la présence de formations du type dit "périglaciaire" en Algérie oriéntale.** *C. R. Acad. Sci., Paris,* (1955), 24, No. 11, 1246-8.

1–06570 — BELEVTZEV (Ya. N), SIROSHTAN (R.I.) and SKURIDIN (S.A.). **In Russian.** (Granites in the pebbles of conglomerates of the upper layer of the Krivoy-Rog srata). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 951-4.

1–06571 — BELSKAYA (T.N.) and IVANIA (V.A.). **In Russian.** (The coral-stromatoporous biogerm of the upper Devonin age on the river Tomi). *C. R. Acad. Sc. U.R.S.S.* (1955), 0, No. 3, 5336.

1–06572 — BERGOUNIOUX (F.). **Crocodilliens fossiles de dépots phosphatés du sud-Tunisien.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1917-8.

1–06573 — BERNARD (A.). **Sur l'origine du minerai de zinc d'Alby Fontbonne (Gard).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1250-2.

1–06574 — BERTHOIS (L.). **Sédimentation dans l estuaire de la Loire en période hivernale.** *C. R. Acad. Sci., Paris,* (1955) 240, No. 17, 1691-3.

1–06575 — BEZNOSIKOVA (A.V.) and POLUBOYARINOV (D N.). **In Russian.** (The processus of formation of a sesondary mullite). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 761-4.

1–06576 — BIGNAND (C.). **Sur les propriétés et les synthèse quelques minéraux uranifères.** *Bull. Soc. Franc. Minér. Cryt.* (1955), 78, No. 1-3 3, 1-26.

1–06577 — BIRRELL (K.S.), FIELDES (M.) and WILLIAMSON (K.I.). **Unusual form of halloysite** *Amer.. Min.* (1955), 40, No. 12 122-4.

1–06578 — BIZARD (CH.). **Présence de pechblende dans le Permo-Trias métamorphiques des Alpes francaises.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7. 791-3.

1–06579 — BLANC (J.) et BONIFAY (E.). **Les grés quaternaires littoraux en Provence occidentale.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1787-8.

1–06580 — BLOM (G.I.). **In Russian.** (The Aptsk sediments in the basin of the river Cbra). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1139-40.

1–06581 — BOGOLEPOV (K.V.). **In Russian.** (The stages of development of the tertiary flora in the Angara region of the Yenisei chain). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. , 985-8.

1–06582 — BOLZE (J.). **Présence du Wealdien dans la série salifère de la zone des diapirs (Tunisie septentrionale).** *C. R. Acad-Sci., Paris,* (1955), 240, No. 11, 1243-5.

1–06583 — BONIFAY (E.). **Le rôle du gel dans la fissuration des galets de roche calcaire.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 8, 896-8.

1–06584 — BONTE (A.). **Sur la formation et l'évolution des poches de dissolution.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1788-90.

1–06585 — BOSWELL (P.G.H.). **Geotechnical studies and geology.** *Sci. Progr.* (1955), 43, No· 170, 228-45.

1–06586 — BOURGUIGNON (P.) et DELECOUR (F.). **Indentification de loess en Gaume.** *Soc. Géol. Belg.* (1955), 78, No. 7, 317-34.

1–06587 — BOURGUIGNON (P.). **Minéraux volcaniques de l'Eifel dans les limons gaumais.** *Soc. Géol. Belg.* (1955), 78, No. 5 173-8.

1–06588 — BOURGUIGNON (L.). **Plissements intraformationnels dans le dévono-carbonifère de la vallée du Samon.** *Soc. Géol. Belg.* (1955), 78, No. 5, 179-90.

1–06589 — BOWEN (R.N.C.). **The stratigraphical range of the foraminiferal genus** Orbulina d'orbigny 18939 *Geol. Mag.*-(1955), 92, No. 2. 162-7.

1–06590 — BRINDLEY (G.W.). **Stevensite, a montmorillonite-type mineral showing mixed-layer characteristics.** *Amer. Mi.* (1955), 40, No. 34, 239-47.

1–06591 — BROOKS (H.K.). **Clastic casts of halite crystal imprints from he rome formation (Cambrian) of tennessee.** *J. Sed. Petr.* (1955), 25, No. 1, 67-71.

1–06592 — BRUNTON (G.). **Vapor pressure glycolation of orien-ed clay minerals.** *Amer. Min.* (1955), 40, No. 12, 124.

1–06593 — BRUUN (A.FR.), BROED (.W.) and FLEMING (C.A.). **Submarine geology of Mlfiosdound, New Zealand** *N. Z. J. Sci. Tech. (Sect. B).* (1955), 36, No. 3, 397-410.

1–06594 — BUCK (D.C.) and STROCK (L.W.). **Trimorphism in zinc sulfide.** *Amer. Mi.* (1955), 40, No. 34, 192-20.

1–06595 — BUERGER (M.J.) and HAHN (TH.). **The crystal structure of bertierite, Fe Sb_2S_4.** *Amer. Min.* (1955), 40, No. 34, 226-38.

1–06596 — BUKIA (S.G.). **In Russian.** (The age of the granitoid mountain range Kamenirtay (Abkhazia. *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 765-7.

1–06597 — BURMA (B.H.) and RILEY (C.M.). **Two unusual occurrences of microstylolites.** *J. Sedi. Petr.* (1955), 25, No. 1, 38-40.

1–06598 — BUSSON (G.) et MAGNE (J.). **Ecsistence de plusieurs termes de la série éocène dans le Tell septentrional entre Cherchell et Flatters (Algerie).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1239-40.

1–06599 — CAILLERE (S.) et KRAUT (F.). **Etude minéralogique du gite de wolfram de Teissières-les Boulies (Cantal).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1650-2.

1–06600 — CAROZZI (A.). **Some remarks on cyclic calcareous sedimentation as an index of climatic variations.** *J. Sed. Petr.* (1955), 25, No. 1, 78-9.

1–06601 — CARTHEW (A.R.). **The quantitativee estimation of of kaolinite by differential thermal analysis.** *Amer. Min.* (1955), 40, No. 1-2, 107-17.

1–06602 — CHARRIN (V.). **Les roches magnésiennes et les produits refractaires, leurs gisements en France.** *Chal. et. Industr.* (1955), 36, No. 357-40.

1–06603 — CHAYES (F.). **A point counter based on the Leitz mechanical stage.** *Amer. Min.* (1955), 40, No. 12, 126-7.

1–06604 — CHEKHOVICH (V.D.). **In Russian.** (The stratigraphic importance of the Silurian tables and heliolithids of the Middle Asia). *C. R. Acad. c. U.R.S.S.* (1955), 100, No. 3, 55-8.

1–06605 — CLOUD (P.E.). **Physical limits of glauconite formation.** *Amer. Assoc. Petro. Geol.* (1955), 39, No. 4, 484-92.

1–06606 — CORNET (A.). **Présence du Callovien marin dans l'Atlas saharien du Sud oranais (Monts des Ksours).** *C. R. Acad. Sci., Paris,* (1955), 240,No. 14, 1559-60.

1–06607 — CORSIN (P.).**Position systématique de Pecopteris.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 661-3.

1–06608 — COULOMB (R.). **Dispersion des radioéléments de la famille uranium-radium dans les eaux naturelles.** *Bull. Soc. Franc. Cryst.* (1955), 78, No. 1, 3, 89-96.

1–06609 — CUSHMAN (R.L.) and HALPENNY (L.C.). **Effect of western drought on the water resources of Safford valley, Arizona 1940-1952.** *Trans. Amer. Geophys.* (1955), 36, No. 1, 87-94.

1–06610 — DANZE (J.). **Evolution de la pinnule chez les Sphenopteris.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 1565-7.

1–06611 — DAPPLES (E.C.). **General lithofacies relationship of St. Peter land-stone and Simpson group.** *Amer. Assoc Petro. Geol.* (1955), 39, No. 4, 444-67.

1–06612 — D'ARRIGO (A.). **Caractéristiques géohydrologiques du défer Lement des vagues au dessus de sources sous-marines.** *Ann. Ponts. Chaux.* (1955), No. 1, 107-21.

1–06613 — DATZKO (V.G.). **In Russian.** (The dynamics of the phosphates in the upper layers of the Black Sea). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1127-9.

1–06614 — DERANIYAGALA (P.E.P.). **Ages of the hippopotamus dnd** Elephas maximus **fossils in the gem sand of Ceylon.** *Geol. Mag.* (1955), 92, No. 1, 50-2.

1–06615 — DEFLANDRE (G.) et COOKSON (I.). **Sur les microplancton fossile conservé dans diverses roches sédimentaires australiennes s'étageant du Crétacé inférieur au Miocène supérieur.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1235-7.

1–06616 — DRESNAY (R. du.). **Sur la structure tectonique du Jebel Haouanite (Haut-Atlas marocain oriental) et les accidents ("structure d'affaissement" et décoiffement) de sa bordure Nord.** *C.-R. Acad. Sci., Paris,* (1955), 240, No. 11, 1245-6.

1–06617 — DWORNIK (E.) and ROSS (M.). **Application of the electron microscope to mineralogic studies.** *Amer. Min.* (1955), 40, No. 34, 261-74.

1–06618 — EINARSSON (T.) and SIGURGEIRSSON (T.). **Rock magnetism in Iceland.** *Nature, London,* (1955), 175, No. 4464, 892.

1–06619 — ELLENBERGER (P.). **La Quartenaire du Basutoland (Afrique du Sud) Note préliminaire).** *C. R Acad. Sci., Paris,* (1955), 240, No. 7, 793-5.

1–06620 — ELLIOTT (G.F.). **Additions to the british eocene brachiopod fauna.** *Geol. Mag.* (1955), 92, No 2, 168-72.

1–06621 — EMERY (K.O.). **Transportation of rocks by driftwood.** *J. Sed. Petr.* (1955), 25, No. 1, 51-7.

1–06622 — FARRINGTON (W.B.). **Analysis of stress conditions in the upper Sparaberry in western Texas.** *Trans. Amer. Geophys. Un.* (1955) 36, No. 1, 139-43.

1–06623 — FERGUSSON (G.J.) and RAFTER (T.A.). **New Zealand C age measurements-II.** *N. Z. J. Sci. Tech. (Sect. B.).* (1955),-36, No. 3, 371-5.

1–06624 — FLOWER (R.H.). **Cameral deposits in orthoconic nautiloids.** *Geol. Mag.* (1955), 92, No. 2, 89-102.

1–06625 — FOSTER (W.F.). **Simple method for the determination of the plagioclase feldspars.** *Amer. Min.* (1955), 40, No. 34, 179-85.

1–06626 — FOURMARIER (P.). **Réflexions au sujet de la faille du Rocheux (Fenêtre de Theux).** *Soc. Géol. Belg.* (1955(, 78, No. 5, 191-203.

1–06627 — FREDERICKSON (A.F.). **Mosaic structure in quartz.** *Amer. Min.* (1955), 40, No. 12 1-9

1–06628 — GARSON (M.S.). **Flow phenomena in a limestone on Changalumi hill Southern Nysaland.** *Geol. Mag.* (1955), 92, No. 2, 155-61.

1–06629 — GEZE (B.). **Homologies entre la tectonique hercynienne et la tectonique tertiaire dans le Sud de la Montagne Noire (Héralt).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1241-3.

1–06630 — GEZE (B.). **Le prolongement du massif infracambrien du Mendic sous les terrains jurassiques du Larzac (Hérault).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1911.

1–06631 — GILLOTT (J.D.). **Metamorphism of the Manx slates** *Geol. Mag.* (1955), 92, No. 2, 141-54.

1–06632 — GRAMBAST (N.) et GRAMBAST (L.). **Les Raskylloideae sous-famille fossile des Characeae.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 999-1001.

1–06633 — GRIMBERIEUX (J.). **Origine et asymétrie des vallées séches de la Hesbaye.** *Soc. Géol. Belg.* (1955), 78, No. 6, 267-88.

1–06634 — GRYAZNOV (N.K.). **In Russian.** (The most important stages of development of the Saratov-Ryazan depression). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1145-8.

1–06635 — GUERRERO (R.G.) and KENNER (C.T.). **Classification of permian rocks of western Texas by a versenate method of chemical analysis.** *J. Sed. Petr.* (1955), 25, No. 1, 45-50.

1–06636 — GUILCHER (A.) **Geomorphologie de l'extremite septentrionale du banc coralilen Farsan.** *Ann. Ind. Oceanog.* (1955), 30, 55-100.

1–06637 — GUILLEMIN (C.) et PERMINGEAT (F.). **Revue des espèces minérales nouvelles.** *Bull. Soc. Franc. Cryst.* (1955), 78, No. la 3,-214-26.

1–06638 — GUILLEMIN (C.). **Sur une variéte d'hialogite du Cap Garonne.** *Bull. Soc. Franc. Minér. Cryst.* (1955), 78, No. 1-3 27-32.

1–06639 — HAIN (V.E.), SHARDANOV (A.N.) and KASIMOVA (N.M.). **In Russian.** (The stratigraphy of the middle Jurassic of the South-eastern Caucausus). *C. R. Acad. Sci., U.R.S.S.* (1955), 100, No. 5, 965-8.

1-06640 — NANTUSH (M.S.) and JACOB (C.E.). **Non-steapy green's functions for an infinite strip of leaky aquifer** *Trans.. Amer. Geophys. Un.* (1955), 36, No. 1, 101-12·

1-06641 — HENDRICKS (S.B.). **Screw dislocations and charge balance as factors of crystal growth.** *Amer. Min.* (1955), 10, No. 34. 139-46.

1-06642 — HEYLER (D.). **Remarques sur les** Branchiosaurus **de la région d'Autun.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 997-8.

1-06643 — HIEMSTRA (S.A.). **Baddeleyite from Phalaborwa, Eastern Transvaal.** *Amer. Min.* (1955), 40, No. 34, 275-82.

1-06644 — HOFFSTETTER (R.). **Sur le Biidés fossiles de la sous-famille des Erycinés.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 644-5.

1-06645 — HOURS (R.), NESTEROFF (W.D.) t ROMANVSKY (V). **Utilisation d'un traceur radioactif dans l'étude de l'évolution d'une plage.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1798-9.

1-06646 — HUNTUSH (M.S.), GLOVER (R.E.) nd BAMR (G.G.) **River depletion resulting from pumping a well near a r ver.**-*Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 345-6.

1-06647 — HURLBUT (C.S.). **Demonstration polariscope.** *Amer· Amer. Min.* (1955), 40, No. 1-2, 120-2.

1-06648 — HURLBUT (C.S.). **Notes and news:Beryllian idocrase from Franklin, New Jersey.** *Amer. Min.* (1955), 40, No. 1-2, 118-19.

1-06649 — IRELAND (H.A.). **Pre-cambrian surface in northeastern Oklahoma and parts of adjacent states.** *Amer. Assoc. Petro. Geol.* (1955), 39, No. 4, 468-83.

1-06650 — INDICHENKO (L.N.)· **In Russian.** (The semi-quantitative spectral analysis in mineralogical and geochemical studies)· *C. R. Acad. Sci. U.R.S.S.* (195), 100, No. 4, 775-8.

1-06651 — INOSOVA (K.I.) and NESTERENKO (L.P.). **In Russian.** (The spores and pollen of the Permian sediments of the Dontez drainage basin). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 779-82.

1-06652 — JAEGER (J-L.), OVTRACHT (A.) et ROUTHIER (P.). **Controle paléogéographique des gisements de fer et de la magnése des Corbières.** *C. R. Acad., Sci. Paris,* (1955), 240, No. 6, -638-40.

1-06653 — JODRY (R.L.). **Rapid method for determining mag, nesium-calcium ratios of well samples and its use in predicting structure and secondary porosity in calcareous formations.** *Amer. Assoc. Petro. Geol.* (1955), 39, No. 4, 493-511.

1-06654 — JUNG (J.). **Un nouveau type de diagramme· pour la représentation des caractères chimiques des associations régionales de laves.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 79-800.

1-06655 — KATCHENKOV (S.M.) and FLEGONTOVA (E..). **In Russian.** (Minor elements in the Devonian rcks of the Volga-Ural region). *C. R. Acad. Sci. U.R..S.* (1955), 100, No. 4, 79-52.

1-06656 — KHRAMOV (A.N.). **In Russian.** (The study of the residual magnetism of the rainfall in relation to the problem of the stratigraphic correlation and differentation of the strata). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 551-4.

1-06657 — KHRENOV (P.M.). **In Russian.** (A case of lithological control of tungsten ore formation). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 981-3.

1-06658 — KING (B.C.). **The tectonic pattern of the lewisian around Clashnessie bay near Stoer, Sutherland.** *Geol. Mag.* (1955), 92, No. 1, 69-80.

1-06659 — KIRK (R.D.). **The luminescence and tenebrescence of natural and synthetic sodalite.** *Amer. Min.* (1955), 40, No. 12, 22-31.

1-06660 — KOHN (J.A.) and HATCH (R.A.). **Synthetic mica investigations, VI:X ray and optical data on synthetic fluorphlogopite.** *Amer. Min.* (1955), 40, No. 12, 10-21.

1-06661 — KRUMBEIN (W.C.). **Experimental design in the earth sciences.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 1, 1-10.

1-06662 — KRYGOWSKI (B.). **An attempt o mechanize the grathe graniformarter, a device for the separation of geavel grains according to rounding grade.** *Bull. Acad. Polonaise, Sci.* (1955), 3, No. 2, 121-4.

1-06663 — KUNO (H.). **Ion substitution in the diopsideferropeigeonite series of clinopyroxenes.** *Amer. Min.* (1955), 40, No. 12, 70, 93.

1-06664 — KUZMENKO (M.V.) and KAZAKOVA (M.E.). **In Russian.** (The new mineral nenadkevichite). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1159-60.

1-06665 — LAFFITTE (R.) et MAGNE (J.). **Présence dans le Dahra (Algérie occidentale) d'une série de passage du crétacé à l'eocène.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1352-4

1-06666 — LAGNEAU-HERENGER (L.). **Remarques sur la classification des Spongiaires fossiles et essai de nouvelle classification.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 1563-4.

1-06667 — LAVOCAT (R.). **Découverte de dipneustes du genre** Protopterus **dans le tertiaire ancien de Tamaguilelt.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1915-7.

1-06668 — LAVOCAT (R.). **Sur les relations systématiques entre les Théridomyidés et divers Rongeurs fossiles d'Afrique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 634-5.

1-06669 — LAVOCAT (R.). **Sur un membre antérieur du Dinosaurien sauropode** Bothriosphndylus **Owen recueilli à Madagascar.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1795-6.

1-06670 — LEE (D.E.). **Occurrence of pyrophanite in Japan.** *Amer. Min.* (1955), 40, No. 12, 32-41.

1-06671 — LEGRAYE (M.) et GOFFINET (A.). **Etude gélogique et métallogénique du gisement de wolfram de Montredon-Labessonie (Tarn, France).** *Soc. Géol. Belg.* (1955), 87, No. 6, 203-46.

1-06672 — LE MAIRE (D.). **Découverte du genre** Amphigenia **dans le Synclinal de Tindouf (Sahara occidental).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1659-6.

1-06673 — LEHMAN (J-P.). **Les dipneustes du dévonien supérieur du Groenland.** *C. R. Acad. Sci., Paris,* (1955) 240, No. 9, 995--7

1-06674 — LEVINSON (A.A.). **Studies in the mica group:Poly morphism among illites and hydrous micas.** *Amer. Min.* (1955), 40, No. 12, 41-49.

1-06675 — LIBOUTRY (L.). **L'incorporation des éboulis dans la glace.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 15, 1523-5.

1-06676 — LIEGEOIS (P.-G.). **Considérations spéléologiques à propos de phénomènes de dissolution dans une grotte à Landelies.** *Soc. Géol. Belg.* (1955), 78, No. 7, 369-79.

1-06677 — LLIBOUTRY (L.). **Origine et évolution des glaciers rocheux.** *C. R. Sci., Paris,* (1955), 240, No. 19, 1913-5.

1-06678 — LLIBOUTRY (L.). **Surimposition d'un débordement glaciaire à un glacier d'éboulis.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1654-7.

1-06679 — LOGINOV (V.P.) and LOMEIKO (E.I.). **In Russian.** (New facts on the geological age of the Western plutonic complex of the Middle (Urals). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 957-9.

1-06680 — LOUIS N.). **Some theoretical aspects of rock magnetism.** *Advanc. Phys.* (1955), 4, No. 14, 191-243.

1-06681 — LOVE (L.D.). **The effect on stream flow of the killing of spruce and pine by the Engelmann spruce beetle.**-*Trans. Amer. Geophys. Un.* (1955), 36, No. 1, 113-8.

1-06682 — LUCAS (G.). **Caractéres pétrographiques de calcaires noduleux, à facies ammonitico rosso, de la région méditerranéenne·** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1909-11.

1-06683 — LUGA (A.A.). **In Russian.** (The geological constitution of the Apsheron threshold of the Caspian Sea). *C. R. Acad. U.Sci. R.S.S.* (1955), 100, No. 6, 1149-50.

1-06684 — MANIL (G.). **Quelques types spéciaux de paléosols et leur importance géomorphologique.** *Soc. Géol. Belg.* (1955), 78, No. 7, 289-96.

1-06685 — MANN (V.I.). **A spot test for dolomitic limestones.** *J. Sed. Petr.* (1955), 25, No. 1, 58-9.

1-06686 — MARLIFRE (R.). **Definition actuelle et gisement du Montien dans le bassin de Mons.**-*Soc. Géol. Belg.* (1955), 78-

1-06687 — MASSON (P.H.). **An occurrence of gypsum in south, west Texas.** *J. Sed. Petr.* (1955), 25, No. 1, 73-7.

1-06688 — MCHEDLISHVILI (N.D.). **In Russian.** (Spore-pollen complexes of the Duabi strata). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 769-70.

1-06689 — MCHEDLISHVILI (P.A.). **In Russian.** (New facts on the flora of the Kotzakhur level). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 537-9.

1-06690 — McKENNA (M.C.). **Paleocene mammal, Goler formation, Mojave desert, California.** *Amer. Assoc. Petro. Geol.* (1955), 39, No. 4, 512-5.

1-06691 — MICHOT (P.). **Les brèches calcaires à ciment de calcite macrosphérolithique.** *Soc. Géol. Belh.* (1955), 78, No. 7, 253-68.

1-06692 — MICUOT (J.). **Le phénomène magmatique au sein du massif anorthositique de Haaland, Engersund, Norvège.** -*Soc. Géol. Belg.* (1955), 78, No. 6, 247-66.

1-06693 — MOROZOVA (I.P.). **In Russian.** (New Upper Devonian bryozoa of the Kuznetzk region). *C. R. Acad. Sci. U.R.S.S.* (1955) 100, No. 4, 783-6.

1-06694 — MOROZOVA (I.P.). **In Russian**. (The discovery of a new species of cryptostomata in the upper Carbonaceous of the Don bend). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 567-9.

1-06695 — MURDOCH (J.). **Phosphate minerals of the borborema pegmatites:I-Patrimonio.** *Amer. Min.* (1955), 40, No. 12, 50-63.

1-06696 — **Natural permanent magnetization of the lower basalts of northern Ireland.** *Nature, London,* (1955), 175, No. 4461, 759.

1-06697 — NEIVA (J.M.C.), RIMSKY (A.) et SANDREA (A.). **Sur une variété de gahnite stannifére de Cabanas (Portugal).** *Bull. Soc. Franc. Cryst.* (1955), 78, No. 1, 3, 97.

1-06698 — NESTERENKO (L.P.). **In Russian.** (The composition and the constituents of the formation of cupriferous sands of the Donetz watershed basin). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 961-4.

1-06699 — NICHOLLS (G.D.). **The geology of north-east Jan-Mayen.** *Geol. Mag.* (1955), 92, No. 2, 127-40.

1-06700 — NICHOLLS (G.D.). **The mineralogy of rock magnetism.** *Advanc. Phys.* (1955), 4, No. 14, 113-90.

1-06701 — NIINO (H.). **Sand pipe from the sea floor of California.** *J. Sed. Petr.* (1955), 25, No. 1, 41-4.

1-06702 — NOVOJILOV (N.I.). **In Russian.** (New bivalve phyl. lopoda, the Asmyssiidae from the upper devonian and lower carbonaceous of Siberia). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 787-8.

1-06703 — NOVOJILOV (N.I.). **In Russian.** (The fossils of peculiar cirripedia of the middle Devonian of Southern Siberia). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1161-2.

1-06704 — OTTMANN (F.) et PICARD (J.). **Sur quelques mouvements tectoniques récents sur les cotes Nord et Est de la Sicile.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1230.

1-06705 — OZANSOY (F.). **Sur les gisements continentaux et les Mammifères du Néogène et du Villafranchien d'Ankara (Turquie).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 992-4.

1-06706 — PERMINGEAT (F.). **Sur les niobo-tantalates de l'Anti-Atlas, Maroc:tapoilite et columbite.** *Bull. Soc. Franc. Cryst.* (1955), 78, No. 1-3, 123-56.

1-06707 — PERRIN (R.). **Réaction chimique à distance dans le le solide en métallurgie et géologie.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1846-9.

1-06708 — PHILLIPS (W.J.). **The metasomatic rocks associated with the criffell-dalbeattie granodiorite.** *Geol. Mag.* (1955), 92, No. 1, 1-20.

1-06709 — PIDOPLICHKO (I.G.). **In Russian.** (New facts on the fauna of the vertebrate anthropogenic sediments of the Ternopol region). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 989-91.

1-06710 — POOLE (E.G.) and WHITEMAN (A.J.). **Exploratory boreholes in the prestwich area of the South-East Lancashire coalfields.** *Trans. Inst. Min. Engrs, London,* (1955), 114, No. 4, 291-318.

1-06711 — POPOV (Yu. N.). **In Russian.**-(The ecology of the tertiay xylophaga of the family of Teredidae). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 789-91.

1-06712 — PROSKURKO (A.I.). **In Russian.** (Findings of dia porphyrites and tuffites in the Dniestr region). *C. R. Acad. Sci.* (1955), 100, No. 5, 969-71.

1-06713 — PERINET (G.) et MICHAUD (R.). **Le magnésium des squelettes des organismes marins ne se trouve que dans le réseau de leur calcite, l'argonite restant toujours pure.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 633-4.

1-06714 — RAFTER (T.A.). **Carbon dioxide as a substitute for solid carbon in C age measurements.** *N. Z. J. Sci., Tech.* (*Sect. B.*). (1955), 36, No. 3, 363-70.

1-06715 — RANSON (G.). **La consolidation des sédiments calcaires dans les régions tropicales.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 640-2.

1-0716 — RANSON (G.). **Observations, en Océanie francaise, sur la formation des récifs barrières et des atolls.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 8, 890-900.

1-06717 — RANSON (G.). **Observations sur l'agent essentiel de la dissolution du calcaire dans les régions exondées des îles coralliennes de l'Archipel des Tuamotu. Conclusions sur le processus de la dissolution du calcaire.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 1007-9.

1-06718 — RESHETNYAK (N.D.). **In Russian.** (The silex formations of the lower Carbonaceous of the South-western boundaries of the Donbass). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 973-6.

1-06719 — RIBES (G.) et BASCOU (J.). **Etude sur la salinté des estuaires à marée.**-*Ann. Ponts. Chaux.* (1955), No. 2, 169.

1-06720 — RIM (M.) and HUBERTY (M.R.). **Symposium on land erosion, some observations on siol erosion in the Middle and Eastern Mediterranean Area.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 342.

1-06721 — ROBICHET (O.). **Action de technique d'extraction des oxydes de fer libres dans les sols sur certains produits ferrugineux.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1354-5.

1-06722 — ORY (D.M.) and ROY (R.). **Synthesis and stability of minerals in the system MgO-Al_2O_3-SiO_2-H_2O.** *Amer. Min.* (1955), 40, No. 34, 147-78.

1-06723 — ROTH (R.). **Paleogeology of panhandle of Texas.** *Amer. Assoc. Petro. Geol.* (1955), 39, No. 4, 422-43.

1-06724 — ROUBAULT (M.) et COPPENS (R.). **Sur les relations certains gites filoniens d'uranium et la présence d'inclusions ra, dioactives dans les roches encaissantes.** *C. R. Acad. Sci., Paris-* (1955), 240, No. 11, 1248-50.

1-06725 — RYABYKH (O.F.). **In Russian.** (The relief of the surface of the chalk deposits of the Oskol trough). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 541-4.

1-06726 — SCHOELLER (H.). **Géochimie des eaux souterraines. Application aux eaux des gisements de pétrole(I).** *Rev. Inst. Inst. Franc. Petrole,* (1955), 10, No. 3, 181-213.

1-06727 — SCHOELLER (H.). **Géochimie des eaux souterraines. Application aux eaux des gisements de pétrole(II).** *Rev. Inst. Franc. Pétrole,* (1955), 10, No. 4, 219-46.

1-06728 — SCHOEP (A.), BORCHERT (W.) et KOHLER (K.). **La likasite Cu_{12} $(OH)_{14}$ $(N\ 0_3)_4$ $(P0_4)_2$, nouveau minéral.** *Bull. Soc. Franc. Minér. Cryst.* (1955), 78, No. 1-3. 84-8.

1-06729 — SHAUB (B.M.). **Origin of styloties:a discussion.** *J. Sed. Petr.* (1955), 25, No. 1, 60-6.

1-06730 — SIDORENKO (A.V.). **In Russian.** (The relation between the mineralogical and mechanical constitution of sands). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 977-80.

1-06731 — SILLANS (R.). **L'uniformité des cadres géographiques oubanguiens et sa répercussion sur la végétation.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1360-2.

1-06732 — SITTLER (C.). **Méthodes et techniques physicochimiques de préparation des sédiments en vue de leur analyse pollinique.** *Rev. Inst. Frans. Pétrole,* (1955), 10, No. 32, 103-14.

1-06733 — SMIRNOV (G.A.) and SVIRSCHEVSKY (I.S.). **In Russian.** (Palaeographical importancs of the slanting stratification of sandstone in the Carboniferous stratum of the Kize-region in the Urals). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1151-3.

1-06734 — SOLOVIEVA (M.N.). **In Russian.** (The stratigraphy of of the upper Palaeozoic of he Zieil-Kums). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 545-6.

1-06735 — STERNBERG (A.A.). **In Russian.** (The rhythmical deposition of sediments in the Daghestan lower Jurassic strata). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1155-7.

1-06736 — STROCK (L.W.) and VINCENT (A.B.). **Synthetic zinc sulfide polytype crystals.** *Amer. Min.* (1955), 40, No. 12, 94-106.

1-06737 — SULTANOV (K.M.). **In Russian.** (Oysters of the Tarkhan level of Azerbaidjan). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 547-9.

1–06738 — SWINEFORD (A.) and FRYE (J.C.). **Petrographic comparison of some loess samples from western Europewith kanasas loess.** *J. Sedi. Petr.* (1955), 25, No. 1, 3-23.

1–06739 — SWITZER (G.) and FOSHAG (W.F.). **Ordonezite, zinc antimonate, a new mineral from Guanajuato, Mexico.** *Amer. Min.* (1955), 40, No. 12, 64-69.

1–06740 — TERMIER (H.) et TERMIER (G.). **Sur la séismicité de l'Afrique du Nord.** *C. R. Acad. Sci., Paris,* (1955), 240, No.7 797-9.

1–06741 — THALER (L.). **Présence de deux espéces éteintes de rongeurs cricetinés dans les brèches ossifières villafranciennes de Sète.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1255-7.

1–06742 — THEOBALD (N.). **Alluvions anciennes et séries loessiques des environs de Griesheim (Bas-Rhin).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 795-7.

1–06743 — THOMSON (A.G.). **South african chromite.** *Iron. Steel, London,* (1955), 28, No. 2, 65-7.

1–06744 — THOMPSON (M.E.), WEEKS (A.D.) and SHERWOOD (A.M.). **Rabbittite, a new uranyl carbonate from Utah.** *Amer. Min.* (1955), 40, No. 34, 201.

1–06745 — THOMPSON (W.O.). **The oil and gas field of Colorado, by the Rocky Mountain.** *Amer. Assoc. Petro. Geol.* (1955), 39, No. 4, 516-7.

1–06746 — THORSTEINSSON (R.). **The mode of cladial-generation in** Cytograptus. *Geol. Mag.* (1955), 92, No. 1, 37-49.

1–06747 — VEDENEEVA (N.E.) and RATEEV (M.A.). **In Russian.** (The benzidine reaction applied to clays of the monothermic type). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 771-73.

1–06748 — VELIKOVSKAYA (E.M.). **In Russian.** (Red coloured sediments of the Plocene on the territory of the U.S.S.R. and foreign Asia). *C. R. Acad. Sci. U.R.S.S.* (1955), 100 No. 6, 1141-4.

1–06749 — VORONETZ (N.S.) and LAPTINSKAYA (E.S.). **In Russan.** (New facts on the lower jurassic of the Anabarsk region). -*C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 955-6.

1–06750 — WALLAEYS (R.) et CHUDRON (G.). **Applications des layons a l'étude d'un amas d'ossements mis à jour en Syrie par MM. Louis Dubertret et Maurice Dunand.** *Bull. Soc. Franc. Cryst.* (1955), 78, No. 13, 116-22.

1–06751 — WALTON (P.T.). **Wasatch plateau gas fields, Utah.** *Amer. Assoc. Petro. Geol.* (1955), 39, No. 4, 385-421.

1–06752 — WATT (A.S.). **Stone stripes in Breckland, Norfolk.** *Geol. Mag.* (1955), 92, No. 2, 173-4.

1–06753 — WEEKS (A.D.), THOMPSON (M.E.) and SHERWOOD (A.M.). **Navajoite, a new vanadium oxide from Arizona.** *Amer. Min.* (1955), 40, No. 34, 207-12.

1–06754 — WEISS (L.E.), MCINTYRE (D.B.) and KURSTEN (M.). **Contrasted sys of folding in the rocks of Ord Ban.** *Geol. Mag.* (1955), 92, No. 1, 21-36.

1–06755 — WILLAMSON (W.O.). **Lineations in three artificial tectonites.** *Geol. Mag.* (1955), 92, No. 1, 53-62.

1–06756 — WILSON (W.T.) and GERDEL (R.W.). **The transmission of water through snow.** *Trans. Amer. Geophys. Un.* (1955), 36, No. 2, 347-8.

1–06757 — WIMBERLEY (S.). **Marine sediments north of scripps submarine canyon, La Jolla, California.** *J. Sedi. Petr.* (1955), 25, No. 1, 24-37.

1–06758 — WOLFE (C.W.). **Crystallography of jadeite crystals from near Cloverdale, California.** *Amer. Min.* (1955), 40, No. 34, 248-60.

1–06759 — WYART (J.) et SABATIER (G.). **Nouvelles mesures de la solubilité du quartz, de la tridymite et de la coristobalite dans l'eau sous pression au-dessus de la température editique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1905-7.

G. Biological Sciences

G 1. GENERAL BIOLOGY.

1-06760 — AINSWORTH (G.C.). **The principles of microbial classification:Host-parasite relatioships.** *J. Gen. Microbiol*, (1955), 12, No. 2, 352-5.

1-06761 — AINSWORTH (G.C.). **The principles of microbial classification:Nomenclature the handmaid of classification.** *J Gen. Microbiol*, (1955), 12, No. 2, 322-3.

1-06762 — ANDREWES (C.H.). **The principles of microbial classification:The classification of viruses.** *J. Gen. Microbiol*, (1955), 12, No. 2, 358-61.

1-06763 — BAWDEN (F.C.). **The principles of microbial classification:The classification of viruses.** *J. Gen. Microbiol*, (1955), 12, No. 2, 362-6.

1-06764 — BISSET (K.A.). **The principles of microbial classification:The value of cytological studies in elucidating natural relationships among bacteria.** *J. Gen. Microbiol*, (1955), 12, No. 2, 325-19.

1-06765 — BRAUNSTEIN (A.E.). **In Russian.** (Problems of cell metabolism and the biology of lhe cell in the works of V.A. Engelhardt). *Adv. Mod. Biol., Moscow*, (1955), 39, No. 1, 18-24.

1-06766 — BUNT (J.S.). **The importance of bacteria and other microorganisms in the sea-water at Macquarie Island.** *Aust. J. Mar. Feshw. Res.* (1955), 6, No. 1, 60-5.

1-06767 — CLARKE (P.H.). **The principles of microbial classification:Methods for determining the biochemical activities of micro-organisms as applied to classification.** *J. Gen. Microbiol*, (1955), 12, No. 2, 337-43.

1-06768 — CONNER (R.L.) and VAN WAGTENDONK (W, J.). **Steroid requirments of** Paramecium aurelia. *J. Gen. M. robiol*, (1955), 12, No. 1, 31-6.

1-06769 — COOPER (K.E.) and RAMADAN (F.M.). **Studies in the differentiation between human and animal pollution by means of faecal streptococci.** *J. Gen. Microbiol*, (1955), 12, No. 2, 180-90.

1-06770 — COWAN (S.T.). **The principles of microbial classification:Introduction:the philosphy of classification.** *J. Gen. Microbiol*, (1955), 12, No. 2, 314-19.

1-06771 — DVORYANKIN (F.A.). **In Russian.** (Fasts in favour of the Michurin ontogenesis theory). *Adv. Mod. Biol., Moscow*, (1955), 39, No. 1, 111-22.

1-06772 — EADIE (J.M.) and OXFORD (A.E.). **Factors involved in the production'of a novel kind of derangement of storage mechanism in living holotrich ciliate protozoa from sheep rumen.** *J. Gen. Microbiol*, (1955), 12, No. 2, 298-310.

1-06773 — ELSDEN (S.R.). **The principles of microbial classification:Considerations of general physiology.** *J. Gen. Microbiol*, (1955), 12, No. 2, 332-6.

1-06774 — FERRARY (R.). **Etude comparée de l'activité stathmocinétique de la colchicine et de la thiocolchincine.** *C. R. Acad. Sci,, Paris*, (1955), 240, No. 17, 1717-9.

1-06775 — FINNEY (D.J.), HAZLEWOOD (T.) and SMITH (M.J.). **Logarithms to base two.** *J. Gen. Microbiol*, (1955), 12, No. 2, 222-5.

1-06776 — FRFY-WYSSLING (A.). **On the density and the optics of silk fibroin.** *Biochem, Biophys, Acta.* (1955), 17, No. 1, 155-6.

1-06777 — FREIDLAENDER (M.), MOORE (D.H.), LOVE (R.), BROWN (R.A.) and KOPROWSKI (H.). **Development of anopheles a virus in the endoplasmic reticulum of ehrilich ascites tumour cells.** *Nature, London*, (1955), 175, No. 4462, 812-3.

1-06778 — GIBSON (T.). **The principles of microbial classification: General morphology.** *J. Gen. Microbiol*, (1955), 12, No. 2, 324.

1-06779 — GRABAR (P.) et WILLIAMS (C.A.). **Méthode immunoélectrophorétique d'analyse de mélanges de substances antigéniques.** *Biochem. Biophys. Acta.* (1955), 17, No. 1, 67-74.

1-06780 — HANSEN (I.A.) and NOSSAL (P.M.). **Morphological and biochemical effects of freezing on yeast cells.** *Biochem. Biophys. Acta.* (1955), 16, No. 4, 502-12.

1-06781 — HOLMES (F.O.). **The principles of microbial classification:The classification of viruses.** *J. Gen. Microbiol*, (1955), 12, No. 2, 356-7.

1-06782 — HUDSON (J.P.) and WILLIAMS (I.H.). **Juvenility phenomena associated with crown gall.** *Nature, London*, (1955), 175, No. 4462, 814.

1-06783 — ISAACS (A.) and DONALD (H.B.). **Particle counts of haemagglutinating viruses.** *J. Gen. Microbiol*, (1955), 12, No. 2, 241-47.

1-06784 — IVANOV (M.V.). **In Russian.** (A method of determunation of the production of bacterial biological material in a water-tank). *Microbiology, Moscow*, (1955), 24, No. 1, 79-89.

1-06785 — JINKIN (L.N.) and MIKHAILOV (V.P.). **In Russian.** (The new cell theory and its factual foundation). *Adv. Mod. Biol., Moscow*, (1955), 39, No. 2, 228-44.

1-06786 — JUKOV-VEREJNIKOV (N.N.), MAISKY (I.N.) and KALINICHENKO (L.A.). **In Russian.** (The notion of spesies and species-formation in microbiology). *Adv. Mod. Biol., Moscow*, (1955), 39, No. 2, 245-52.

1-06787 — KARAPETYAN (S.K.). **In Russian.** (The influence of prolonged exposition to light on the increase of the biological activity of a living organism). *Adv. Mod. Biol., Moscow*, (1955), 39, No. 1, 65-76.

1-06788 — KLIENEBERGER-NOBEL (E.) and CUCKOW (F. W.). **A study of organisms of the the pleuropneumonia group by electron microscopy.** *J. Gen. Microbiol*, (1955), 12, No. 1, 95-9.

1-06789 — KNIGHT (B.C.J.G.). **The principles of microbial classification:Nutritional characters.** *J. Gen. Microbiol*, (1955), 12, No. 2, 348-51.

1–06790 — LARIONOF (L.F.). **In Russian.** (The trophic theory of development of malignant tumors). *Adv. Mod. Biol., Moscow* (1955), 39, No. 2, 196-211.

1–06791 — LECAMP (M.). **Sur un mode d'activation du pouvoir de régénération chez un Batracien anoure**, Alytes obstetricans. *C. R. Acad. Sci., Pris*, (1955), 240, No. 9, 1023-5.

1–06792 — LISTON (J.). **A group of luminous and non-luminous bacteria from the intestine of flatfish.** *J. Gen. Microbiol*, (1955), 12, No. 1, i.

1–06793 — McLEISH (J.). **Radiation sensitivity and themitotic cycle in** Vicia faba. *Nature, London*, (1955), 175, No. 4464, 890-2.

1–06794 — NISMAN (B.), HIRSCH (M.) et MARMUR (J.). **Etude de la synthèse des protéines par des fragments cellulaires de** B. coei. **I. L'incorporation de la valine-C.** *C. R. Acad. Paris*, (1955), 240, No. 19, 1939-41.

1–06795 — OAKLEY (C.L.). **The principles of microbial classification:Bacterial toxins and classification.** *J. Gen. Microbiol*, (1955), 12, No. 2, 344-7.

1–06796 — PARKER (K.D.). **Infra-red dichroism of fibrous proteins.** *Biochem. Biophys. Acta.* (1955), 17, No. 1, 148-9.

1–06797 — PEEL (J.L.). **The flavins of some micro-organisms.** *J. Gen. Microbiol*, (1955), 12, No. 1, 60-62.

1–06798 — PIRIE (N.W.). **The principles of microbial classification:Summing-up.** *J. Gen. Microbiol*, (1955), 12, No. 2, 382-6.

1–06799 — PROOM (H.). **The minomal nutritional requirements of organisms of the genus** Bordetella **Lopez.** *J. Gen. Microbiol* (1955), 12, No. 1, 63-75.

1–06800 — PONTECORVO (G.). **The principles of microbia, classification:The impact of genetics.** *J. Gen. Microbiol*, (1955), 12, No. 2, 330-1.

1–06801 — RAZUMOV (A.S.). **In Russian.** (Membrane filters and their use in the microbiological examination of water). *Microbiology, Moscow*, (1955), 24, No. 2, 734-46.

1–06802 — ROCHFORD (D.J.), JITTS (H.) and PROCTOR (A.). **The chainomic pycnometer:An instrument for the rapid determination of the salinity of sea-water.** *Aust. J. Mar. Feshw. Res.* (1955), 6, No. 1, 66-81.

1–06803 — ROWLEY (D.). **A mouse virulence factor among** Escherichia'coli **strains.** *J. Gen. Microbiol*, (1955), 12, No. 1, *iv-v.*

1–06804 — RUBAN (E.L.). **In Russian.** (Checking the purity of Nitrosomonas cultures). *Microbiology, Moscow*, (1955), 24, No. 1, 22-4.

1–06805 — SHATTOCK (P.M.F.). **The principles of microbial classification:The use of serology in the classification of micro-organisms.** *J. Gen. Microbiol*, (1955), 12, No. 2, 367-74.

1–09806 — SHAW (M.W.). **Preliminary studies on potato aphid in north and north-east Scotland.** *Ann. Appl. Biol.* (1955), 43, No. 1, 37-50.

1–06807 — STOCKER (B.A.D.). **The principles of microbial classification:Bacteriophage and bacterial classification.** *J. Gen. Gen. Microbiol*, (1955), 12, No. 2, 375-81.

1–06808 — STOUT (J.D.). **The effect of partial steam sterilization on the protozoan fauna of a greenhouse soil.** *J. Gen. Microbiol*, (1955), 12, No. 2, 237-40.

1–06809 — STUDITSKY (A.N.). **In Russian.** (The scientific legasy of Lamarck). *Adv. Mod. Biol., Moscow*, (1955), 39, No. 1, 3-17.

1–06810 — TRACEY (M.V.). **A rapid colorimetric distinction between glucosamine and galactosamine.** *Biochem. Biophys. Acta.* (1955), 17, No. 1, 159-60.

1–06811 — WAINWRIGHT (S.D.) and NEVILL (A.). **Modification of the biological effects of ultraviolet irradiation by post-irradiation treatment with iodoacetate and peptone. With an appendix on an interpretation of the effects of post-radiation treatments based on a chemical model.** *J. Gen. Microbiol*, (1955), 12, No. 1, 1-2.

1–06812 — WAINWRIGHT (S.D.) and NEVILL (A.). **Induction of provariants as a function of dose of ultraviolet radiation. With an appendix on the contribution of differential effects upon survival of provariant and nonvariant pores in the modifications of induced variant frequency resulting from post-radiation treatments.** *J. Gen. Microbio*, (1955), 12, No. 1, 13-24.

1–06813 — WEIDEL (W.) and KELLENBERGER (E.). **The E. coli B-receptor for the phage T5. II. Electron microscopic studies.** *Biochem, Biophys. Acta.* (1955), 17, No. 1, 1-9.

1–06814 — ZAVARZINA (N.B.). **In Russian.** (Elaboration of the method of preparation of cultures of Scendesmus quadricauda and Daphnia longispina, marked with radio-active phosphorus). *Microbiology, Moscow*, (1955), 24, No. 1, 31-5.

G2.—MICROGRAPHY and MICROSCOPY.

1–06815 — POTTS (B.P.). **Electron microscope observations on trichocysts.** *Biochem. Biophys. Acta.* (1955), 16, No. 4, 464-70.

G. 3. GENETICS.

1–06816 — ALLEN (G.), and KALLMAN (F.J.). **Frequency and types of mental retardation in twins.** *Amer. J. Hum. Genet.* (1955), 7, No. 1, 15-20.

1–06817 — BARBER (H.N.). **Adaptive gene substitution in** Tasmanian eucalypts. **Genes controling the development of glaucousness.** *Evolutio*Y, (1955), 9, No. 1, 1-4.

1–06818 — BARICOT (N.A.), BIRBECK (M.S.C.) and CUCKOW (F.W.). **The electron microscopy of human hair pigments.** *Ann. Hum. Genetics* (1955), 19, No. 3, 231-49.

1–06819 — COUSIN-(G.). **Sur les bases génitiques de la détermination des parentés entre espèces d'une même famille (cas de quelques espèces de Gryllides syngamiques).** *C. R. Acad. Sci.,-Paris*, (1955), 24, No. 19, 1245-7.

1–06820 — CRAM (W.H.). **Self-compatibility of** Caragana arborescens **Lam** *Canad. J. Bot.* (1955), 33, No. 2, 149-55.

1–06821 — DAVID (F.N.). **The transformation of discrete variables.** *Ann. Hum. Genetics*, (1955), 19, No. 3, 174-82.

1–06822 — DELAMATER (E.D.), HUNTER (M.E.), SZYBALSKI (W.) and BRYSON (V.). **Chemically induced aberrations of mitosis in bacteria.** *J. Gen. Microbiol*, (1955), 12, No. 2, 203-12.

1–06823 — DOBZHANSKY (T.). **Animal cytology and evolution.** *Evolution* (1955), 9, No. 1, 101-2.

1–06824 — DOBZHANSKY (T.). **Atlas of men.** *Evolution* (1955), 9, No. 1, 102-4.

1–06825 — DOBZHANSKY (T.). **Genetic hometasosis.** *Evolution*, (1955), 9, No. 1, 100-1.

1–06826 — FEJER (S.O.). **Genotype-environment interactions in** Lolium perenne. *Nature, London*, (1955),-175, No. 4465, 944-5.

1–06827 — FORSSMAN (H.). **Two different mutations of the X-chromosome causing diabetes insipidus.** *Amer. J. Hum. Genet.* (1955), 7, No. 1, 21-7.

1–06828 — FUJII (T.), MOLONEY (W.C.) and MORTON (N.E.). **Data on the linkage of ovalocytosis and blood groups.** *Amer. J. Hum. Genet.* (1955), 7, No. 1, 72-5.

1–06829 — FURNESS (G.) and ROWLEY (D.). **Transfer of motility of** Escherichia coli **K 12 to** E. coli **B.** *J. Gen. Microbiol*, (1955), 12, -No. 1, v.

1–06830 — FUJII (T.). **Mutations in einkorn wheat induced by x-rays. 1. Chlorina mutants.** *Proc. Jap. Acad.* (1955), 31, No. 2, 88-92.

1–06831 — GILL (E.D.). **The problem of extinction, with special references to Australian marsupials.** *Evolution*, (1955), 9, No. 1, 87-92.

1–06832 — GRAHAM (J.B.) and BADGLEY (C.E.). **Spilthand with unusual complications.** *Amer. J. Hum. Genet.* (1955), 7, No. 1, 44-50.

1–06833 — GRUBB (R.) and SJOSTEDT (S.). **Blood groups in abortion and sterility.** *Ann. Hum. Genetics*, (1955), 19, No. 3, 183-95.

1–06834 — HARLAND (S.C.) and PENRSOE (L.S.). **Genetics and the advancement of science.** *Advanc. Sci.* (1955), 11, No. 44, 383-90.

1–06835 — HARRIS (H.), MITTWOCH (U.), ROBSON (E.B.) and WARREN (F.L.). **The pattern of amino-acid excretion in crystinuria.** *Ann. Hum. Genetics*, (1955), 19, No. 3, 196-208.

1–06836 — HUGHES (W.H.). **The differences in antibiotic sensitivity of closely related single cells of** Proteus vulgaris. *J. Gen. Microbiol*, (1955), 12, No. 2, 269-74.

1-06837 — HUGHES (W.H.). **The inheritance of differences in growth rate in** Escherichia coli. *J. Gen. Microbiol*, (1955), 12, No. 2, 265-68.

1-06838 — IVANOV (V.G.). **In Russian.** (Influence of the time of keeping of eggs on the sex-ratio in the descendants of hens). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 1021-3.

1-06839 — JENKI6 (C.R.) and ROWLEY (D.). **Resistance to colicin E as a genetic marker in** E. coli K12. *Nature, London*, (1955),-175, No. 4461, 779.

1-06840 — JOHNSTON (O.) and KIRBY (V.V.)Jr. **Syndactyly of the ring and little finger.** *Amer. J. Hum. Genet.* (1955), 7, No. 80-2.

1-06841 — KIHLAMAN (B.). **Chromosome breadage in** Allium **by 8-cthoxycaffeine and X-rays.** *Ext. Cell. Res.* (1955), 8, No. 2, 345-68.

1-06842 — KIHLMAN (B.). **Studies on the effect of oxygen on chromosome breakage induced by 8-ethyoxycaffeine.** *Exp. Cell. Res.* (1955), 8, No. 2, 404-7.

1-06843 — KOMAI (T.), KISHIMOTO (K.I.) and OZAKI-(Y.). **Genetic study of microcephaly based on Japanese material.** *Amer. J. Hum. Genet.* (1955), 7, No. 1, 51-65.

1-06844 — LARIONOV (V.F.). **In Russian.** (The reproduction of pigeons at low temperature). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1171-3.

1-06845 — LESINS (K.). **Techniques for rooting cuttings, chro-** *J. Agric. Sci.* (1955), 35, No. 1, 58-67.

1-06846 — LEVITAN (M.). **Studies in linkage in populations. I. Associations of second chromosome linkages in** Drosophila robusta. *Evolution*,-(1955), 9, No. 1, 62-74.

1-06847 — LEWONTIN (R.). **The effects of population density and composition on viability in** Drosophila melanogaster. *Evolution* (1955), 9, No. 1, 27-41.

1-06848 — LONGHURST (A.R.). **Evolution in the Notostraca.** *Evolution*, (1955), 9, No. 1, 84-6.

1-06849 — MATSUNAGA (E.). **Intra-uterine selection by the ABO incompatibility of mother and foetus.** *Amer. J.-Hum. Genet.* (1955), 7, No. 1, 66-71.

1-06850 — MATHER (K.). **Polymorphism as an outcome of disruptive selection.** (*Evolution*, (1955), 9, No. 1, 52-61.

1-06851 — MIKAELSEN (K.). **The protective property of thiorea against radiotion-induced chromosome aberrations.** *Exp. Cell. Res.* (1955), 8, No. 2, 400-3.

1-06852 — MORGAN (W.C.) Jr. **A new syndrome of anomalies in mice and possible human counterpart.** *Amer. J. Hum. Genet.* (1955), 7, No. 1, 39-43.

1-06853 — NEEL (J.V.). **On some pitalls in developing an adequate gentic hypothesis.** *Amer. J. Hum. Genet.* (1955), 7, No. 1, 1-14.

1-06854 — ORTON (G.L.). **The role of ontogeny in systematics and evolution.** *Evolution*, (1955), 9, No. 1, 75-83.

1-06855 — PENROSE (L.S.). **Recent developments in human genetics.** *Sci. Progr.* (1955), 43, No. 169, 1-12.

1-06856 — PHELPS (V.R.). **Bibliography of human genetics.** *Amer. J. Hum. Genet.* (1955), 7, No. 1, 87-91.

1-06857 — POLANI (P.E.) and CAMBELL (M.). **An aetiological study of congenital heart disease.** *Ann. Hum. Gen tics* (1955), 19, No 3, 209-30.

1-06858 — REED (T.E.) and FALLS (H.F.). **A pedigree of aniridia with a discussion of geminal mosaicism in man.** *Amer. J. Hum. Genet.* (1955), 7, No. 1, 28-38.

1-06859 — SCHOLANDER (P.F.). **Evolution of climatic adaptation in homeotherms.** *Evolution*, (1955), 9, No. 1, 15-26.

1-06860 — SILMAN (I.D.). **The genesis of man.** *Evolution*, (1955), 9, No. 1, 94-9.

1-06861 — SLATIS (H.M.). **Comments on the rate of mutation to chondrodystrophy in man.** *Amer. J. Hum. Genet.* (1955), 7, No. 1, 76-9.

1-06862 — SNEATH (P.H.A.). **Putrescine as an essential growth factor for a mutant of** Aspergillus nidulans. *Nature, London*, (1955), 175, No. 4462-818.

1-06863 — STEVENSON (A.C.), CHEESEMAN (E.A.) and HUTH (M.C.). **M scular dystrophy in northern Ireland. III. Linkage date with particular reference to autosomal limb girdle muscular dystrophy.** *Ann. Hum. Genetics*, (1955), 19, No. 3, 165-73.

1-06864 — STEVENSON (A.C.). **Muscular dystrophy in northern Irland. II. An account of none additional familes.** *Ann. Hum. Genetics*, (1955), 19, No. 3, 159-64.

G. 4. PLANT TAXONOMY and SYSTEMATIC.

1-06865 — BALME (B.E.) and HENNELLY (J.P.E.). **Bisaccate sporomophs from australian permian coals.** *Aust. J. Bot.* (1955), 3, No. 1, 89-98.

1-06866 — GAUSE (G.F.). **In Russian.** (Some questions on the classification of the Actinomycates). *Microbiology, Moscow*, (1955), 24, No. 1, 103-13.

1-06867 — HALL (N.) and JOHNSTON (R.D.). **Field identification of dicotyledons:A punched card system for the identification of families.** *Aust. J. Bot.* (1955), 3, No. 1, 82-8.

1-06868 — HUGHES (S.J.). **Microfungi. I.** Cordana, Brachysporium, Phramgocephala. *Canad. J. Bot.* (1955), 33, No. 3, 259-68.

1-06869 — KUDRYAVTZEV (V.I.). **In Russian.** (On J. Lodder and N.J.W. Kreger-van Rij's book ,The yeasts' (A taxonomic study'.) *Microbiology, Moscow*, (1955), 24, No. 2, 247-51.

1-06870 — NAORA (H.). **Microspectrophotometry of cell nucleus stained by feulgen reaction.** *Exp. Cell. Res.* (1955), 8, No. 2, 259-78.

1-06871 — NICOLLE (P.), JUDE (A.) et LE MINOR (L.). **Sur deux variantes culturales spontanées de Salmonella typhi.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 6, 694-6.

1-06872 — NICOT (J.). **Remarques sur les peuplements de Micromycètes des sables désertiques.** *C. R. Acad. Sci., Paris*, (1955), 24, No. 21, 2082-4.

1-06873 — PESHKOV (M.A.). **In Russian.** (The anoptral microscope, a new optical instrument for the study of transparent objects). *Adv. Mod. Biol., Moscow*, (1955), 39, No. 2, 253-6.

1-06874 — QUEZL (P.). **Remarques sur le caryotype de quelques espèces méditerranéennes au Hoggar.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 11, 1262-4.

1-06875 — ROMANKOVA (A.G.) and KOBRINA (Yu. P.). **In Russian.** (Antagonistic properties of fungi of the Penicillium genus from different systematic groups). *Microbiology, Moscow*, (1955), 24, No. 1, 73-4.

1-06876 — SHARPE (M.E.). **A serological classification of lactobacilli.** *J. Gen. Microbiol*, (1955), 12, No. 1, 107-22.

1-06877 — USTINOVA (E.I.). **In Russian.** (Aposporia of the sunflower). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1163-6.

G. 5. CYTOLOGY and PLANT MORPHOLOGY.

1-06878 — ALLEN (E.K.), GREGORY (K.F.) and ALLEN (O.N.). **Morphological development of nodules on** Caragna arborescens **Lam.** *Canad. J. Bot.* (1955), 33, No. 2, 139-48.

1-06879 — AUSTIN (A.P.). **Meiosis in** Furcellaria fostigiata (L.). **Lamour.** *Nature, London*, (1955), 175, No. 4464, 905.

1-06880 — BARNARD (C.). **Histogenesis of the inflorescence and flower of** Triticum aestivum **L.** *Aust. J. Bot.* (1955), 3, No. 1, 1-20.

1-06881 — BERSILLON (G.). **Sur la formation du bouton floral chez le** Papaver somniferum **L.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 8, 903-5.

1-06882 — BELL (H.P.) and BURCHILL (J.). **Flower development in the lowbush blueberry.** *Canad. J. Bot.* (1955), 33, No. 3, 251-8.

1-06883 — BRODIE (H.J.). **Sepringboard plant dispersal mechanis ms operated by rain.** *Canad. J. Bot.* (1955), 33, No. 2, 156-67.

1-06884 — CANNY (M.J.). **High resolution autoradiography of water-soluble substances.** *Nature, London.* (1955), 175, No. 4463, 857-8.

1-06885 — CHATTAWAY (M.M.). **The anatomy of bark. II. Oil glands in** Eucalyptus **species.** *Aust. J. Bot.* (1955), 3, No. 1, 21-7.

1-06886 — CHATTAWAY (M.M.). **The anatomy of bark. III. Englarged fibres in the bloodwoods** (Eucalyptus **ssp.).** *Aust. J. Bot.* (1955), 3, No. 1, 28-38.

1-06887 — CHATTAWAY (M.M.). **The anatomy of bark. IV. Radially elongated cells in the phellodem of species of** Eucalytus. *Aust. J. Bot.* (1955), 3, No. 1, 39-47.

1-06888 — CHADEFAUD (M.). **Sur les pièces florales pluriramées: calices à sépalules, méristémonie, pétalostèmes, obdiplostémonie.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1355-8.

1-06889 — CHATEAU (M.R.). **Note sur l'anatomie florale et la répartition des sexes sur les pieds du papayer commun** (Carica papaya L.) *Rev.-Gen. Bot,* (1955), No. 733, 136-42.

1-06890 — CHAMPAGNANT (M.). **Origine épidermique des bourgeons axillaires sur l'épicoytle de** Li aria chalepensis **Mill.** *C. T. Acad. Sci., Paris,* (1965), 240, No. 11, 1264-6.

1-06891 — COUPLAND (R.T.) and ALEX (J.F.). **Distribution of vegetative buds on the underground parts of leafy spurge.** (Euphorbia esual **L.**). *Cand. J. Agric. Sci.* (1955), 35, No. 1, 76-82.

1-06892 — DEKEN-GRENSON (M.). **Action de la streptomycine sur la formation des chloroplastes.** *Biochem, Biophys, Acta.* (1955), 17,-No. 1, 35-47.

1-06893 — DREW (K.M.). **Sequence of sexual and asexual phases in** Antithamnion spirographidis **Schiffner.** *Nature, London,* (1955), 175, No. 4462, 813-4.

1-06894 — GOEDHEER (J.C.). **Orientation of the pigment molecules in the chloroplast.** *Biochem, Biophys, Acta.* (1955), 16, No. 4, 471-6.

1-06895 — GRANDET (J.). **Sur le point végétatif du** Soja hispida **Moench.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 1003-5.

1-06896 — HEIM (P.). **Le noyau dans le cycle évolutif du** Plasmodiophora brassicae **Woron.** *C. R. Acad. Sci., Paris,* (1955) 240, No. 19, -1921-2.

1-06897 — HEIM (P.). **Sur les divisions nucléaires dans** Plasmodiophora brassicae **Woron.** *C. R. Acad. Sci., Paris,* (1955), 240, -No. 21, 2080-2.

1-06898 — HENRY (M.P.). **Morphologie de la feuille d'**Elaeis **au cours de sa croissance.** *Rev. Gen Bot.* (1955),-No.-735, 319-23.

1-06899 — HENRY (M.P.). **Note préliminaire sur l'organisation foliaire chez le palmier à huile.** *Rev. Gen. Not.* (1955), No. 733, 127-35.

1-06900 — ILINSKAYA-TZENTILOVICH (M.A.) and ROJDESTVENSKY (V.D.). **In Russian.** (The structure of the secondary roots and the stability of the winter-crop wheat to falling), *C. R. Acad.-Sci. U.R.S.S.* (1955), 100, No. 4, 801-3.

1-06901 — JOYEAUX (Y.) et CROSON (M.). **Etude d'une lactico-déshydrogénase d'une souche de** Bacterium anitratum (Neisseria Winogradskyi). *C. R. Acad. Sci., Paris,* (1955), 240 No. 19 1252-4.

1-06902 — KAMEN (M.D.) and VERNON (L.P.). **Comparative studies on bacterial cytochromes.** *Biochem, Biophys, Acta.* (1955), 17, No. 1, 10-22.

1-06903 — KVASNIKOV (B.V.) and DOLGIKH (S.T.). **In Russian.** (Signification of the assimilation apparatus and of the root system in the susceptibility of a bean plant to tuber bacteria). *Microbiology, Moscow,* (1955), 24, No. 2, 180-7.

1-06904 — LANCE (A.). **Répartition de l'acide ribonucléisue dans les méristèmes apicaux de deux composées.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1238-9.

1-06905 — LEVACHER (PH.). **Sur la phyllotaxie du** Linum usitatissimum L. *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 656-8.

1-06906 — LINDENBERG (B.) et ZUILI (S.). **Proportion de l'eau liée non solvante dans la cellule de levure.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 813 5.

1-06907 — LOISEAU (J-E.), DESCHATRES (R.) et BUGNON (F.). **Essai de classification des principaux types de corrélations fonctionnelles entre les centres générateurs foliaires, dans la tige des Spermaphytes.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 651-4.

1-06908 — LOISEAU (J-E.). **Influence de destructions ménagées de l'anneau initial sur la phyllotaxie.** *C. Acad. R. Sci., Paris,*-(1955), 240, No. 17, 1715-7.

1-06909 — PLANTEFOL (L.). **La dissociation sur les tubercules de Pomme de terre.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 649.

1-06910 — RANSON (G.). **Observations sur les principaux agents de la dissolution du calcaire sous-marin, dans la zone cotière des iles coralliennes de l'Archipel des Tuamotu.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, -806-8.

1-06911 — SALL (T.) and MUDD (S.). **A cytological study of** Caryophanon latum. *J. Gen. Microbiol,* (1955), 12, No. 1, 47-53.

1-06912 — SMITH-WHITE (S.). **Chromosome numbers and pollen types in the Epacridaceae.** *Aust. J. Bot.* (1955), 3, No. 1, 48-67.

1-06913 — SOUEGES (R.). **Embryogénie des Ombellifères. Développement de l'embryon chez l'**Eryngium amethystinum L. *C. R. Acad.-Sci., Paris,* (1955),-240, No. 15, 1596-8.

1-06914 — WILKIN (G.D.) and RHODES (A.). **Observation on the morphology of** Streptomyces griseus **in submerged culture.** *J. Gen. Microbiol* (1955), 12,-No. 2, 259-64.

1-06915 — WINKWORTH (R.E.). **The use of point quadrats for the analysis of heathland.**-*Aust. J. Bot.* (1955), 3, No. 1, 68-81.

G. 6. PLANT PHYSIOLOGY.

1-06916 — ASANA (R.D.) and MANI (V.S.). **Studies in physiological analysis of yield. II. Further observations on varieta, differences in photosynthesis in leaf and ear in wheat.** *Physiol Plant.* (1955), 8, No. 1, 8-19.

1-06917 — BAKHADUR (K.). **In Russian.** (Influence of the change of the proportion of carbon to notrogen on the metabolism of Dhar,s yeasts). *Microbiology, Moscow,* (1955), 24, No. 2. 141-6.

1-06918 — BEZBORODOV (A.M.). **In Russian.** (Carolinoid pigments of fungi and bacteria). *Adv. Mod. Biol., Moscow,* (1955), 39, No. 2, -154-62.

1-06919 — BIDWELL (R.G.S.), KROTKOV (G.) and REED (G.B.). **The influence of light and darkness on the metabolism of radioctive glucose and glutamine in wheat leaves.** *Canad. J. Bot.* (1955), 33, No. 2, 189-96.

1-06920 — BENDA-(G.T.A.). **Some effects of ultra-violet radiation on leaves of french bean** (Phaseolus vulgaris **L.**). *Ann. Appl. Biol.* (1955), 43, No. 1, 71-85.

1-06921 — BOLLE-JONES (L.E.W.). **Tantative method of sugar estimation in laminae and its applicaion to** Hevea brasiliensis. *Physiol, Plant.* (1955), 8, No. 1, 1-7.

1-06922 — BURSTROM (H.). **Evaluation of the growth activity of naphthalene derivatives.** *Physiol, Plant.* (1955), 8, No. 1, 174-88.

1-06923 — BUSNEL (R.G.) et OBOLENSKY (G.). **Etude microcalorimétrique de l'accélération de la germination des graines traitées aux ultrasons.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1358-60.

1-06924 — CANTINO (E.C.) and HORENSTEIN (E.A.). **The role of ketoglutarate and polyphenol oxidase in the synthesis of melanin during morphogenesis in** Blastocladiella emersonii. *Physiol, Plant.* (1955), 8, No. 1, 189-221.

1-06925 — CHAMPIGNY (M-L.). **Les acides aminés libres, les acides aminés de peptides et desprotéines dans les feuilles de** Bryophyllum Daigremontianum **Berger.** *C. R. Acad. Sci., Sci., Pais,* (1955), 240, No. 11, 1257-9.

1-06926 — CHOSE (T.K.) and WIKEN (T.). **Inhibition of bacterial sulphate-reduction in presence of short chain fatty acids.** *Physiol, Plant,* -(1955), 8, No. 1, 116-35.

1-06927 — CHRISTIAN (J.H.B.). **The influence of nutrition on on the water relations of** Salmonella oranienburg. *Aust. J. Biol. Sci.* (1955), 8, No. 1, 75-82.

1-06928 — CODACCIONI (M.). **Comparaison des points végétatifs d'**Evonymus japonicus **Th. et** Helianthus annuus **L. et de leurs fonctionnements.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 8, 905-7.

1-06929 — CRETE (P.). **Embryogénie des Résédacées. Development de l'embryon chez le** Reseda glauca **L.** *C.-R. Acad. Sci., Paris,* (1955), 240, No. 6, 645-7.

1-06930 — DOBROLYUBSKY (O.K.) and SLAVVO (A.V.). **In Russian.** (The influence of supplying the roots with microamounts of zinc and cobalt on the crop and the chemical constitution of grapss). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 583-6.

1-06931 — DE LEY (J.) and VANDAMME (J.). **The metabolism of sodium 2-keto-D-gluconate by micro-organisms.** *J. Gen. Microbiol*, (1955), 12, No. 2, 162-71.

1-06932 — DEMIN (N.N.), NISTRATOVA (S.N.) and ROZANOBA (L.S.). **In Russian.** (The action of acstylcholine and the excitation of the wandering nerve on the content of ,free sulphydryl groups in tissues). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 597-600.

1-06933 — EVENARI (M.), NEUMANN (G.) and KLEIN (SH.). **The influence of red and infrared light on the respiration of photoblastic seeds.** *Physiol, Plant*, (1955), 8, No. 1, 33-47.

1-06934 — FEDOROV (M.V.) and ERNANDES (A.). **In Russian.** (Physiological pesuliarities of weakened and non-typical cultures of Azobacter, isolated from turf-podzolic soils). *Microbiology, Moscow*, (1955), 24, No. 2, 170-9.

1-06935 — FRIES (N.). **Fruther experiments on the response of decotylised pea seedlings to arginine.** *Physiol, Plant.* (1955), 8, No. 1, 164-73.

1-06936 — GALTZOVA (R.D.). **In Russian.** (Influence of X-ray radiations on the content of sulphydryl groups in yeast organisms). *Microbiology, Moscow*, (1955), 24, No. 2, 137-40.

1-06937 — GAUTHERET (M.R. J.). **Sur la variabilité des propriétés physiologiques des cultures de tissus végétaux.** *Rev. Gen. Bot.* (1955), No. 731 et 732, 5-110.

1-06938 — GOAS (M.). **Sur les propriétés décarboxylantes des organes en croissance. Racines.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 16, 1663-5.

1-06939 — GODNEV (T.N.). **In Russian.** (B.A. Rubin's work "Plant physiology"). *Adv. Mod. Biol., Moscow*, (1955), 39, No. 1, 124-7.

1-06940 — GORYUNOVA (S.V.) and NASONOVA (M.V.). **In Russian.** (Phenomeno of seasonly periodicity of growth and development of monocellular green algae). *Microbiology, Moscow*, (1955), 24, No. 2, 193-8.

1-06941 — GREENIDGE (K.N.H.). **Observations on the movement of moisture in large woody stems.** *Canad. J. Bot.* (1955), 33, No. 2, 202-21.

1-06942 — GROSSBARD (E.). **Stimulation of pigmentation and sporulation in fungi by metabolites of actionmycetes.** *J. Gen. Microbiol*, (1955), 12, No. 1, vi.

1-06943 — GUNDERSEN (K.). **Effects of B-vitamins and amino-acids on nitrification.** *Physiol, Plant.* (1955), 7, No. 1, 136-41.

1-06944 — HATTORI (S.) and SHIROYA (M.). **Studies on the browing and blacking of plant tissues. II. On the interaction of dopa and a specific oxidase in the leaves of** Stizolobium Hassjoo. *Physiol, Plant*, (1955), -8, No. 1, 63-70.

1-06945 — HENDERSON (M.E.K.). **A method for studying the the metabolism of fungi in the wargurg apparatus using spore suspensions.** *J. Gen. Microbiol*, (1955), 12, No. 1, iii-iv.

1-06946 — HOCQUETTE (M.) et MONTUELLE (B.). **Participation des glucides de la membrance au métabolisme cellulaire dans les axes hypocotylés de** Phaseolus vulgaris. *C. R. Acad. Sci., Paris*, (1955), 240, No. 14, 1567-8.

1-06947 — IERUSALIMSKY (A.L.). **In Russian.** Periodicity of multiplication and gas-formation of yeasts in dilute cultures). *Microbiology, Moscow*, (1955), 24, No. 2, 164-9.

1-06948 — IMSHENETSKY (A.A.) and PEROVA (K.Z.). **In Russian.** (Adaptation of yeasts to poisons). *Microbiology, Moscow*, (1955), 24, No. 2, 147-50.

1-06949 — IZARD (C.) et HITIER (H.). **Action du sulfate de dihydrostreptomycine et du sulfate de framycétine sur les divisions cél-lulaires et le chondriome d'**Allium Cepa **L.** *C. R. Acad. Sc Paris*, (1955), 240, No. 8, 901-3.

1-06950 — KARASEVICH (Yu. N.). **In Russian.** (Peculiarities in the development of folded varieties of yeast on agar media). *Microbiology, -Moscow*, (1955), 24, No. 2, 155-9.

1-06951 — KELSO (J.M.) and TURNER (J.S.). **Protoplasmi, streaming in** Tradescantia. **I. The effects of indoleacetic acid and other growth-promoting substances on streaming.** *Aust. J. Biol. Sci.* (1955), 8, No. 1, 19-35.

1-06952 — KENNEDY (J.S.). **Some physiological aspects of virus degenration of potatoes.** *Ann. Appl. Biol.* (1955), 43, No. 1, 149-51.

1-06953 — LALORAYA (M.M.) and JEE (G.). **Effect of tobacco leaf-curl and Tobacco mosaic virus on the amino-acid and amide content of** Nicotiana **sp.** *Nature, London*, (1955), 175, No. 4464, 907-8.

1-06954 — LANDEGARDH (H.). **On partial oxidation of the cytochrome system in the presence of cyanude.** *Physiol, Plant.* (1955), 8, No. 1, 95-105.

1-06955 — LANDEGARDH (H.). **Spectrophotometrical deyerminations of peroxidase in living roots.** *Physiol, Plant.* (1955), 8, No. 1, 84094.

1-06956 — LANDEGARDH (H.). **On the cylochromes band dh in the roots of cereals.** *Physiol, Plant.* (1955), 8, No. 1, 142-63.

1-06957 — LOGINOVA tL.G.). **In Russian.** (Variation of the activity of yeasts due to the conditions of their existence). *Microbiology, Moscow*, (1955), 24, No. 2, 151-4.

1-06958 — LYBIMOV (V.I.). **In Russian.** (Decomposition of urea in bacteria as an intra-cellular process). *Microbiology, Moscow*, (1955), 24, No. 2, 160-3.

1-06959 — McQUILLEN (K.) and SALTON (M.R.). **Synthetic media for maintenance and induction of lysogenic** Bacillus megaterium. *Biolchem, Biophys, Acta.* (1955), 16, No. 4, 596-7.

1-06960 — MERCER (F.V.), HODGE (A.J.), HOPE (A.B.) and McLEAN (J.D.). **The structure and swelling properties of** Nitella **chloroplasts.** *Aust. J. Biol. Sci*, (1955), 8, No. 1, 1-18.

1-06961 — NIELSEN (S.E.). **Influence of pH on the respiration in** Chlorella pyreniodosa. *Physiol, Plant.* (1955), 8, No. 1, 106-15.

1-06962 — OWEN (P.C.). **The respiration of tobacco leaves in the hour period following inoculation with tobacco mosaic virus.** *Ann. Appl. Biol.* (1955), 43, No. 1, 114-21.

1-06963 — OZANNE (P.G.). **The effect of nitrogen on zinc deficiency in subterranean clover.** *Aust. J. Biol. Sci.* (1955), 8, No. 1, 47-55.

1-06964 — PROKOFIEV (A.A.). **In Russian.** (Fat formation in plants). *Adv. Mod. Biol., Moscow*, (1955), 39, No. 2, 129-53.

1-06965 — QUILLET (M.). **Sur la nature chimique de la leucosine. polysaccharide de réserve caractéristique des Chrysophéees, extraite d'Hydrurus foetidus.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 9, 1001-3.

1-06966 — RICHMOND (J.E.) and SALMON (K.). **Studies on the biosynthesis of hemin in soy bean nodules.** *Biochem, Biophys Acta.* (1955), 17, No. 1, 48-55.

1-06967 — ROUGIER (J.). **Sur le point végétatif de l'**Aquilegia vulgaris **L.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 6, 654-6.

1-06968 — RUMYANTZEV (P.P.). **In Russian.** (The reaction of the myocard of mammals to trauma in relation to the age of the animal). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 601-3.

1-06969 — SCOTT (B.I.H.), McAULAY (A.L.) and JEYES (P.). **Correlation between the electric current gernerated by a bean root crowing in water and the rate of elongation of the root.** *Aust. J. Biol. Sci.* (1955), 8, No. 1, 36-46.

1-06970 — SEGRETAIN (G.-MM.) et SCHMIDT (P.). **Necessitk de la symb ose pour maintenir** Poa annua **a l'état vivace.** *Rev. Gen. Bot.* (1955), No. 733, 124-6.

1-06971 — SHORM (F.) and ZELINKOVA (M.). **In Russian.** (The mechanism of the action of antibiotics on the development of plant sprouts). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 525-8.

1-06972 — SHUEL (R.W.). **Nectar secretion in relation to nitrogen supply, nutritional status, and growth of the plant.** *Cand. J. Agric. Sci.* (1955), 35, No. 2, 124-38.

1-06973 — STREET (H.E.). **Factors controlling meristematic activity in excised roots. VI. Effects of various antiauxins on the growth and survival of excised roots of** Lycopersicum esculentum **Mill.** *Physiol, Plant.* (1955(, 8, No. 1, 48.

1-06974 — TERRA (P.). **Transmission du caractère luminescent en rapport avec le phénomène de Buller chez Panus stipticus (Bull).** *C. R. Acad. Sci., Paris*, (1955), 240, No. 19, 1922-4.

1-06975 — TRONCHET (J.). **Courbes de croissance, de nécrose et de rendement des plantules de** Cuscuta gronovii **Willed. cultivées sur sable mouille j l'eau distillée.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 11, 1259-61.

1-06976 — TRUHAUT (R.) et DEYSSON (G.). **Action radiomimétique de la NN'N'' triéthylène-phosphoramide sur les mitoses des cellules végétales:essais de protection par la mercaptoéthylamine.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 14, 1568-70.

1-06977 — TURIAN (G.). **Culture de la phase gamétophtique d'Allomyces javanicus en milieu synthétique liquide.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 1005-9.

1-06978 — ULRICH (R.) et THALER (O.). **Sur la présence et les variations de quelques constituants des poires au cours de leur développement (xylose, acid quinique, proline).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 15, 1625-6.

1-06979 — VITTORIO (P.V.), KROTKOW (G.) and REED (G.B.). **Absorption and utillization of C-glucose bydetached wheat wheat leaves.** *Canad. J. Bot.* (1955), 33, No. 3, 275-80.

1-06980 — WAI (N.). **Effects of some antiseptics on the growth of** Chlorella. *Physiol, Plant.* (1955), 8, No. 1, 71-3.

G. 7. ANIMAL TOXONOMY and SYSTEMATIC

1-06981 — ADAM (W.). **Céphalopodes de la Mer Rouge.** *Ann. Inst. Oceano,* (1955), 30, 185-94.

1-06982 — BAIRD (R.H.). **A chiton,** Callochiton fulvus **(wood), in the river fal.** *Nature, London,* (1955), 175, No. 4465, 954 .

1-06983 — CHERBONNIER (G.). **Holothuries de la Mer Rouge.** *Ann. Inst. Oceanog,* (1955), 30, 129-84.

1-06984 — CONNELL (J.H.). Elminium modestus **Darwin, a northward extension of range.** *Nature, London,* (1955), 175, 4465, 954.

1-06985 — DE PUYTORAC (P.). **Présence simultanée d'une Microsporidie.** Thélohania georgevitchi **sp. nov. dans les cellules intestinales de** Polydora giardi **M. et dans un Cilié parasite du tube digestif de ce même polychète.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 8, 925-7.

1-06986 — DURIVAULT (A.T.). **Sur quelques alcyoniidae de la Mer Rouge.** *Ann. Inst. Oceanog,* (1955), 30, 121-8.

1-06987 — EDMONDS (S.J.). **Australian Sipunculoidea I. The genera Sipunculus, Xenosiphon, and Siphonosoma.** *Aust. J. Mar. Freshw. Res.* (1955), 6, No. 1, 82-97.

1-06988 — ESTEVE (R.R.) et FOURMANOIR (P.). **Poissons de la Mer Rouge** *Ann. Inst. Oceanog,* (1955), 30, 195-200.

1-06989 — FAUVEL (P.). **Annelides polychetes compagne** 1951-2 **en Mer Rouge.** *Ann. Inst. Oceanog,* (1955), 30, 101-120.

1-06990 — GIBSON (L.B.). **Upper devonian Ostracoda from the Cerro Gordo formation of Iowa.** *Bull. Amer. Paleont,* (1955), 35, No. 154, 5-38.

1-06991 — GLACON (S.). **Remarques sur la morphologie et la biologie de quelques larves de** Bathysciinae cavernicoles. *C. R. Acad. fici., Paris,* (1955), 240, No. 6, 679-81.

1-06992 — HYND (J.S.). **A revision of the Australian pearlshells. genus** Pinctada **(Lamellibranchia).** *Aust. J. Mar. Freshw. Res.* (1955), 6, No. 1, 98-137.

1-06993 — IVANOV (A.V.). **In Russian.** (The appartenanse of the class of Pogonophora to a special type of Deuterostoma: Brachiata A. Ivanov, phylum nov.) *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 595-6.

1-06994 — JOHNSON (R.G.). **Philipine Amphibia.** *Evolution* (1955), 9, No. 1, 104-5.

1-06995 — LE DANOIS (Y.). **Sur le remainiement du nouveau sous-ordre:les orbiculates.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1933-4.

1-06996 — NESTEROFF (W.D.). **Les recifs coralliens du banc Farsan nord.** *Ann. Inst. Oceanog,* (1955), 30, 7-54.

1-06997 — NYSTERAKIS (F.) et QUINTIN (S.). **Quelques conconsidérations évolutives à la suite des modifications par l'auxine des trachéides d'**Araucaria excelsa. *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 658-61.

1-06998 — TOKAREV (A.K.). **In Russian.** (The shoals of the ordinary Caspian sprat). *C. R. Acad. fici. U.R.S.S.* (1955), 100, No. 6, 1187-9.

1-06999 — VONOKOV (I.K.) and TANASIYCHUK (V.S.). **In Russian.** (The spawning of the pike perch in the lower Volga). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1183-6.

G. 8. PURE and APPLIED ENTOMOLOGY.

1-07000 — ADKINS (T.R.), SOWELL (W.L.) and ARANT (F.S.). **Systemic effect of selected chemicals on the bed bug and lone star tick when administered to rabbits.** *J. Econ. Ent.* (1955), 48, No. 2, 139-41.

1-07001 — ANDERSON (R.F.). **Internal medication of plants for the control of insects.** *J. Econ. Ent.* (1955), 48, No. 2, 187-90.

1-07002 — APPLE (J.W.) and MARTIN (R.). **Pea aphid control with demeton in relation to pea plant maturity.** *J. Econ. Ent.* (1955), 48, No. 2, 193-5.

1-07003 — BAKER (W.C.) and SCHOOF (H.F.). **Prevention and control of fly breeding in animal carcasses.** *J. Econ. Ent.* (1955), 48, No. 2, 181-3.

1-07004 — BARNES (M.M.) and ASH (C.R.). **Ovicidal action of malation on grape leafhopper eggs.** *J. Econ. Ent.* (1955), 48, No. 2, 220-1.

1-07005 — BECKEL (W.E). **Lidane applied in liquid floor wax for control of silverfish (Thysanura).** *J. Econ. Ent.* (1955), 48, No. 2, 221.

1-07006 — BECKER (W.B.). **Tests with BHC emulsion sprys to keep boring insects out of pine logs in Massachusetts.** *J. Econ. Ent.* (1955), 48, No. 2, 163-7.

1-07007 — BILIOTTI (E.). **Survie des larves endophages de Tachinaires à une mort prématurée de leur hote par maladie.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 1021-23.

1-07008 — BARNES (O.L.). **Effect of food plants on the lesser migratory 'grasshopper.** *J. Econ. Ent.* (1955), 48, No. 2, 118-24.

1-07009 — BONNEMAISON (L.) et MISSONNIER (J.). **Influence du photopéroidisme sur le déterminisme des formes estivales ou hivernales et de la diapause chez** Psyllapyri **L. (Homoptères).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1277-9.

1-07010 — BROWN (A.W.A.). **Effect of clothin color on mosquito attack on exposed skin.** *J. Econ. Ent.* (1955), 48, No. 2, 130.

1-07011 — BROWN (A.W.A.) and MORRISON (P.E.). **Control of adult tabanids by aerial spraying.** *J. Econ. Ent.* (1955), 48, No. 2, 125-29.

1-07012 — BRUCE (W.N.) and DECKER (G.C.). **Factors affecting the performance of treadle spryers.** *J. Econ. Ent.* (1955), 48, No. 2, 167-9.

1-07013 — BRUNDRETT (H.M.), RICHARDS (R.) and SMITH (C.L.). **Tests of toxaphene, chlordane, and Strobane against the lone star tick on cattle.** *J. Econ. Ent.* (1955), 48, No. 2, 223-4.

1-07014 — BURCHFIELD (H.P.) and HARTZELL (A.). **A new bioassay method for evaluation of insecticide residues.** *J. Econ. Ent.* (1955), 48, No. 2, 210-4.

1-07015 — BURKHARDT (C.C.) and BREITHAUPT (M.P.I. **Chemical control of the corn earworm in sorghum heads.** *J. Ecoa Ent.* (1955), 48, No. 2, 225.

1-07016 — BUTLER (G.D.). **The effect of Alfalfa irrigation treatments on the two-spotted spider mite in Alfalfa.** *J. Econ. Ent.* (1955), 48, No. 2, 221-2.

1-07017 — CHAPMAN (R.F.). **Some temperature responses of nymphs of** Locusta migratoria migratorioides **(R. and F.) with special reference to aggregation.** *J. Exp. Biol.* (1955), 32, No. 1, 126.

1-07018 — COHRAN (D.G.). **Differential susceptibility of the sexes and developmental stages of the American cockroach to several insecticides.** *J. Econ. Ent.* (1955), 48, No. 2, 131-3.

1-07019 — COLLINGWOOD (C.A.). **The glasshouse red spider mite on blackcurrants.** *Ann. Appl. Biol.* (1955), 43, No. 1, 144-7.

1-07020 — CREWTHER (W.G.) and MCQUADE (A.B.). **The intestinal microflora of the clothes moth larva** Tineold bisseliella **inrelation to wool digestion.** *J. Gen. Microbiol,* (1955), 12, No. 2, 311-13.

1-07021 — DAVICH (T.B.) and APPLE (J.W.). **Schradan content in field grown peas in relation to pea aphid control.** *J. Econ. Ent.* (1955), 48, No. 2, 180-1.

1-07022 — DEEN (O.T.) and CUTHBERT (F.P.). **The distribution and relative abundance of wireworms in potato-grwing areas of the South-eastern States.** *J. Econ. Ent.* (1955), 48, No. 2, 191-3.

1-07023 — DEGRANGE (CH.). **Sur la morphologie de** Prosopistoma foliaceum **Fourc.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1668-9.

1–07024 — EIDE (P.M.). **Soil treatments for** Brachyrhinus **control in strawberries.** *J. Econ. Ent.* (1955), 48, No. 2, 207-8.

1–07025 — ELMORE (J.C.). **The nature of Lygus bug injury to lima beans.** *J. Econ. Ent.* (1955), 48, No. 2, 148-51.

1–07026 — FAIRCHILD (H.E.) and DAHM (P.A.). **Lice control on chickens with chlorinated hydrocarbon insecticides.** *J. Econ. Ent.* (1955), 48, No. 2, 141-6.

1–07027 — FRASER (A.). **Location and inervation of the corpus cardiacum in the larvae of some Calliphorinae (diptera).** *Nature, London,* (1955), 175, No. 4462, 817-8.

1–07028 — FROST (S.W.). **Response of insects to ultra violet lights.** *J. Econ. Ent.* (1955), 48, No. 2, 155-6.

1–07029 — GAST (R.T.) and BRANN (J.L.). **A laboratory dust mixer.** *J. Econ. Ent.* (1955), 48, No. 2, 217-9.

1–07030 — GERSHENZON (S.M.). **In Russian.** (Specificity of the polyhedral virus diseases of insects of different spesies). *Microbiology, Moscow,* (1955), 24, No. 1, 90-8.

1–07031 — GERSHENZON (S.M.), YAKUSHKINA (E.P.) and PUKHOVICH (R.M.). **In Russian.** (Production of jaundice in insects by hydroxylamine). *Microbiology, Moscow,* (1955), 24, No. 2, 223-8.

1–07032 — GLICK (P.A.) and HOLLINGSWORTH (J.P.). **Response of moths of the pink bolloworm and other cotton insects to certain ultraviolet and cisible radiation.** *J. Econ. Ent.* (1955), 48, No. 3, 173-7.

1–07033 — CRESSMAN (A.W.). **Effect of oil and parathion sprays on soluble solids of oranges.** *J. Econ. Ent.* (1955), 48, No. 2, 216-7.

1–07034 — HAMILTON (E.W.) and HILL (R.E.). **Garden webworm control on corn.** *J. Econ. Ent.* (1955), 48, No. 2, 224-4.

1–07035 — HARCOURT (D.G.) and GASS (L.M.). **Toxicities of various insecticides to cucumber.** *Canad. J. Agric. Sci.* (1955), 35, No. 1, 19-26.

1–07036 — HAWKES (H.A.). **The effects of insecticide treatment on the macrofauna populations, film accumulation and efficiency of sewage percolating filters.** *Ann. Appl Biol.* (1955), 43, No. 1, 122-33.

1–07037 — HAWKINS (J.H.). **Preliminary experiments in corn earworm control.** *J. Econ. Ent.* (1955), 48, No. 2, 199-201.

1–07038 — HENDERSON (Ch.F.) and TILTON (E.W.). **Tests with acaricides against the brown wheat mite.** *J. Econ. Ent.* (1955), 48, No. 2, 157-61.

1–07039 — HOPKINS (L.), ABU YAMAN (I.Œ.) and CARRUTH (L.A.). **Flavor evalution and residue analysis of malathion-treated lettuce.** *J. Econ. Ent.* (1955), 48, No. 2, 151-2.

1–07040 — HOPKINS (L.). **Biology and control of** Polistes excla, lamans **Viereck in Arizona citrus groves.** *J. Econ. Ent.* (1955)-48, No. 2, 161-3.

1–07041 — HOPKINS (T.L.) and HOFFMAN (R.A.). **Effectiveness of Dilan and certain candidate synergists against DDT-resistant house flies.** *J. Econ. Ent.* (1955), 48, No. 2, 146-7.

1–07042 — HURPIN (B.). **Influence du degré d'activité sur le réflexe optocinétique de** Melotontha melolontha L. **(Coléopt. Scarbaeidae).** *C. R. Acad. Sci., Paris.* (1955), 240, No. 18, 1808-9.

1–07043 — HUTCHINSON (M.T.). **Systox for control of the leaf, hopper vector of cranberry false-blossom.** *J. Econ. Ent.* (1955)-48, No. 2, 222-3.

1–07044 — JOHNSON (C.G.) and TAYLOR (L.R.). **The development of large suction traps for airborne insects.** *Ann. Appl.* (1955), 43, No. 1, 51-62.

1–07045 — JONES (G.D.G.). **The cuticular waterproffing mechanism worker honey-bee.** *J. Exp. Biol.* (1955), 32, No. 1, 95-109.

1–07046 — KATZNELSON (H.), JAMIESON (C.A.) and AUSTIN (G.H.). **Further studies on the chemotherapy of diseases of the honeybee.** *Canad. J. Agric. Sci.* (1955), 35, No. 2, 189-92.

1–07047 — KETTLEWELL (H.B.D.). **Labelling locusts with radioactive isotopes.** *Nature, London,* (1955), 175, No. 4462, 821-2.

1–07048 — KETTLEWELL (H.B.D.). **Recognition of appropriate backgrounds by the pale and black phases of lepidoptera.** *Nature, London,* (1955), 175, No. 4465, 943-4.

1–07049 — KONECKY (MS.) and MITLIN (N.). **Chemical Impairment of development in house flies.** *J. Econ. Ent.* (1955), 48, No. 2, 219-20.

1–07050 — LEA (A.O.). **Two items of equipment useful in black fly larval control.** *J. Econ. Ent.* (1955), 48, No. 2, 202-3.

1–07051 — LILES (J.N.) and FISK (F.W.). **Toxicity of several antibiotics adminstred by injection to the German cockroach.** *J. Econ. Ent.* (1955), 48, No. 2, 217.

1–07052 — MEDLER (J.T.). **Method of predicting the hatching date of the meadow spittlbug.** *J. Econ. Ent.* (1955), 48, No. 2, 204-5.

1–07053 — MICKS (D. W.). Vorticella **infestation of** Anopheles atroparvus **larvae.** *J. Econ. Ent.* (1955), 48, No. 2, 215-6.

1–07054 — O'DELL (W.V.). **The gyply moth outbreak in Michigan** *J. Econ. Ent.* (1955), 48, No. 2, 170-2.

1–07055 — PEADT (R.E.) and RYFF (J.F.). **Safe use of dieldrin dust for sheep ked control.** *J. Econ. Ent.* (1955), 48, No. 2, 195-8.

1–07056 — PFADT (R.E.). **Control of army cutworms in Alfalfa.** *J. Econ. Ent.* (1955), 48, No. 2, 2274.

1–07057 — POND (D.D.). **Insecticides against the corn earworm in New Brunswick.** *J. Econ. Ent.* (1955), 48, No. 2, 198-9.

1–07058 — RAMSAY (J.A.). **The excretion of sodium potassium and water by the malpighian tubules of the stick insect,** Dixippus morosus **(Orthoptera, Phasmidae).** *J. Exp. Biol.* (1955), 32, No. 1, 200-16.

1–07059 — RAMSAY (J.A.). **The excretory system of the stick insect,** Dixippus morosus **(Orthoptera Phasmidae).** *J. Exp Biol.* (1955), 32, No. 1, 183-199.

1–07060 — ROTH (A.R.) and EDDY (G.W.). **Tests with some phosphorus compounds against cattle grubs.** *J. Econ. Ent.* (1955), 48, No. 2, 201-2.

1–07061 — SINCLAIR (W.B.) and LINDGREN (D.L.). **Vapor heat sterilization of California citrus and avocado duits against fruit-fly insects.** *J. Con. Ent.* (1955), 48, No. 2, 133-8.

1–07062 — STADDON (B.W.). **The excretion and storage of ammonia by the aquatic larva of** Slialis lutaria **(Neuroptera).** *J. Exp. Biol.* (1955), 32, No. 1, 84-94.

1–07063 — SMITH (F.F.), GLANG (P.) and TAYLOR (E.A.). **Reduction of malathion on vegetables by washing.** *J. Econ. Ent.* (1955), 48, No. 2, 209-10.

1–07064 — SMITH (K.G.V.) and EMPSON (D.W.). **Note on the courtship and predaceous behaviour of** Poecilobolhrus nobilitatus **L. (Dipt Dolichopodidae).** *Brit. J. Anim. Behaviour,* (1955), 3, No. 1, 32-4.

1–07065 — STUBBS (L.L.). **Strains of** Myzus persicae **(Sulz). active and inactive with respect to virus transmission.** *Aust. J. Biol. Sci.* (1955), 8, No. 1, 68-74.

1–07066 — SULLIVAN (W.N.), HORNSTEIN (I.), YEOMANS (A.H.) and TSAO (Ch.). **Improved deposits for controlling insects outdoor.** *J. Econ. Ent.* (1955), 48, No. 2, 153-5.

1–07067 — TAYLOR (C.E.). **Growth of the potato plant and aphid colonization.** *Ann. Appl. Biol.* (1955), 43, No. 1, 151-6.

1–07068 — TOGASHI (S.) and PARKER (R.L.). **Control of the two spotted spider mite on bush beans.** *J. Econ. Ent.* (1955), 48, No. 2, 177-9.

1–07069 — TUMPER (R.). **Sur l'evaluation ergométrique des distances chez les abeilles butineuses.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1936-8.

1–07070 — UNDERHILL (G.W.), TURNER (E.C.) and HENDERSON (R.G.). **Control of the clover root curculio on Alfalfa with notes on life hitory an habits.** *J. Econ. Ent.* (1955), 48, No. 2, 184-7.

1–07071 — VERMA (J.S.). **Comparative toxicity of some insecticides to** Peregrinus maidis **(Ashm.) and its egg-predator.** *J. Econ. Ent.* (1955), 48, No. 2, 205-6.

1–07072 — VOWLES (D.M.). **The foraging of ants.** *Brit. J. Anim. Behaviour,* (1955), 3, No. 1, 1-13.

1–07073 — WEAVER (C.R.) and HAYNES (J.L.). **Band placement of insecticides for clover root borer control.** *J. Econ. Ent.* (1955), 48, No. 2, 190-1.

1–07074 — YERINGTON (A.P.) and GERTLER (S.I.). **Acarricidal properties of 2-cyclohexyl-4,6-Dinitrophenyl and pentachlorophenyl acetates.** *J. Econ. Ent.* (1955), 48, No. 2, 215.

G 9. ANIMAL HISTOLOGY, ANATOMY and EMBRIOLOGY.

1-07075 — BABURINA (E.A.). **In Russian.** (The eye and retina of the Caspian shad fish). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1167-70.

1-07076 — BALESDENT-MARQUET (M.-L.). **Influence de la température sur la mue, l'activityé ovarienne et les caractères sexuels temporaires du crustacé isopode** Asellus aquaticus **L.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1372-4.

1-07077 — BEDNYAKOVA (T.A.). **In Russian.** (Change in the embryonic skin transplanted in the place of the cornea of mature rabbits). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1195-8.

1-07078 — BESSIS (M.). **Etude au microscope électronique des leucocytes ultra-centrifugés.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 17, 1723-5.

1-07079 — BRACHET (J.). **Action of ribonuclease and ribonucleic acid on living amoebae.** *Nature, London,* (1955), 175, No. 4463, 851-3.

1-07080 — BUZKAYA (N.A.). **In Russian.** (The peculiarities of the function of the milt of fish withdifferen types of spawning). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 809-12.

1-07801 — CARLSEN (F.) and KNAPPEIS (G.G.). **The anisotropic and isotropic bands of skeletal muscle in light-and electron microscopy.** *Exp. Cell. Res.* (1955), 8, No. 2, 329-35.

1-07082 — CASANOVA (G.). **Influence du prostomium sur la régénération caudale chez** Platybereis massiliensis **(Moquin-Tandon).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1814-6.

1-07083 — CLEMENT (G.), HAIMOVICI (E.) et LE BERTON (E.). **Nature des acides gras des divers types de lipides au niveau des structures cellulaires du foie de Rat nomal.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1827-9.

1-07084 — CLOWES (R.C.) and ROWLEY (D.). **Evidence for the unity of two of the postulated chromosomes in** Escherichia **K12.** *J. Gen. Microbiol,* (1955), 12, No. 1, iv.

1-07085 — DMITRIEVA (E.V.). **In Russian.** (The formation of nuclei in the fibres of the skeletal muscles during regeneration). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 993-5.

1-07086 — DUMONT (L.). **Localisation histochimique d'acétylcholinestérase dans la thyroide de lapin.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1946-8.

1-07087 — ENDEAN (R.). **Studies of the blood and tests of some Australian ascidians. I. The blood of** Pyura stolonifera **(Heller).** *Aust. J. Mar. Freshw. Res.* (1955), 6, No. 1, 35-59.

1-07088 — FRIANT (M.). **Les caractéristiques fondamentales du cerveau des Rongeurs** (Rodentia). *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1266-8.

1-07089 — FREIDENSTEIN (A.Ya.). **In Russian.** (Amitoses in the transient epithelium). *Adv. Mod. Biol., Moscow,* (1955), 39, No. 1, 123.

1-07090 — FOURNIER (P.). **Relations entre l'utilisation des glucides de structure et l'ossification.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1364-6.

1-07091 — GABE (M.). **Particularités histologiques des cellules neuro-sécrétrices chez quelques Lamellibranches.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1810-2.

1-07092 — GALLIEN (L.). **Descendance unisexué d'une femelle de** Xenopus laevis **Daud. ayant subi pendant sa phase larvaire, l'action gynogène du benzoate d'oestradiol.** *C. R. Acad. Sci., Pris,* (1955), 240, No. 8, 913-5.

1-07093 — HAWES (R.S.J.). A limax-amoeba **from the rectum the grass snake,** Nitrix natrix, **as a facultative aerobe** in vitro. *Nature, London,* (1955), 175, No. 4461, 779-80.

1-07094 — HOUILLON (CH.). **Chute du nombre des gonocytes consécutive à l'agénésie unilatérale du mésonéphros chez** Pleurodeles Waltlii **Michah.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 1019-21.

1-07095 — IGNATIEVA (G.M.). **In Russian.** (Secretion of the ferment of hatching in the embryos of sturgeon fishes). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1199-202.

1-07096 — IGNATIEVA (Z.P.). **In Russian.** (The reparation of a defect in the skeletal muscle of the rabbit and Guinea pig by means of the transplantation of crushed skeletal tissue). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 1017-20.

1-07097 — IGNATIEVA (Z.P.). **In Russian.** (Supplementary innervation as a factor favouring the rehabilitation of hurt muscle in mammals). *C. R. Acad. Sci. U.R.S.S.*)1955), 100, No. 4, 817-20.

1-07098 — IVANOV (V.G.). **In Russian.** (Different sensibility of the male and female chicken embryos). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 829-32.

1-07099 — JIRMUNSKY (A.V.). **In Russian.** (Changes in the cornea following the resection of the sciatic nerve). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 793-5.

1-07100 — JOUBERT (D.M.). **Growth of muscle fibre in the foetal sheep.** *Nature, London,* (1955), 175, No. 4465, 936-7.

1-07101 — KALININA (E.I.). **In Russian.** (Synapses of the spinal chord of the rabbit embryos in the period of development of the motion reflexory reastion). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 1029-31.

1-07102 — KAMENSKAYA (N.L.). **In Russian.** (Some peculiarities of the constitution of the walls of the arteries and veins of the kidney). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 1001-4.

1-07103 — KING (A.S.) and SMITH (R.N.). **A comparison of the anatomy of the intervertebral disc in dog and man.** *Brit. Vet J.* (1955), 3, No. 4, 135-49.

1-07104 — KAUTZ (J.) and DE MARSH (Q.B.). **Fine structure of the nuclear membrance in cells from the chick embryo:On the nature of the so-called "pores" in the nuclear membrane.** *Exp. Cell. Res.* (1955), 8, No. 2, 394-6.

1-07105 — KRISHANA (G.). **Nature of the cuticle of pycnogonida.** *Nature, London,* (1955), 175, No. 4464-904-5.

1-07106 — KUZMINA (G.E.). **In Russian.** (The inflammation in adult segments, growth zone and regenerative tissues of Nereis pelagica). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 833-5.

1-07107 — LENDER (T.). **Sur quelques propriétés de l'organisine de la régéneration des yeux de la Planaire** Polycelis nigra. *C. R. R. Acad. Sci., Paris.* (1955), 240, No. 17, 1726-8.

1-07108 — LUTZ (H.), BONHOMME (CH.) et LUTZ-OSTERTAG (Y.). **Action des ultrasons sur le blastoderme non incubé d'Oiseaux.** *C. R. Acad. Sci. Paris,* (1955), 240, No. 19, 1931-2.

1-07109 — LUTZ (H.) et MAMET (G.). **Influence du système nerveux sur le développement de l'ébauche de l'aile d'Oiseaux en greffe chorioallantiodienne.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1271-3.

1-07110 — MANINA (A.A.). **In Russian.** (Degeneration of muscle nuclei in tissue cultures). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 977-9.

1-07111 — MARKOV (G.S.). **In Russian.** (The inter-special relations in the parasitocenosis of lungs in the grass frog). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1203-5.

1-07112 — MILLOT (J.) et ANTHONY (J.). **Tubes rostraux et tubes naseaux de** Latimeria **(Coelacenthidae).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1241-3.

1-07113 — MUNRO (I.S.R.). **Eggs and larvae of the sabretoothed oyster blenny,** Dasson streadi **(Whitley) (Blenniidae).** *Aust. J. Mar. Freshw. Res.* (1955), 6, No. 1, 30-4.

1-07114 — NATH (V.). **Golgi bodies in the spermatogenesis of pulmonate gastropods.** *Nature, London,* (1955), 175, No. 3464, 905-6.

1-07115 — NIKOLAU (S.S.). **In Russian.** (Proliferation of cells in the human and animal organisms under the influence of some viruses). *Adv. Mod. Biol., Moscow,* (1955), 39, No. 1, 25-46.

1-07116 — PAIN (J.). **Dosage biologique et spectrographique de l'ecto- hormone de reines d'abeilles.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 670-2.

1-07117 — PIETTE (M.). **Sur la métachromasie des granulocytes (Polynucléaires) basophiles du sang.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1366-8.

1-07113 — RAYNAUD (A.) et RAYNAUD (A.). **Formation d'un épidermique supportant le cordon mammaire chez des foetus de Souris traités par un hormone oestrogène.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 810-2.

1-07119 — RAYNAUD (A.). **Observations sur les modifications provoquées par les hormones oestrogènes, du mode de développement des mamelons des foetus du Souris.** *C. R. Acad. Sci., Paris.,* (1955). 240, No. 6, 674-6.

1-07120 — SHILOVA (A.I.). **In Russian.** (The nutrition of the larva of Critcotopus silvestris F. in relation to the constitution of the apparatus). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1191-3.

1-07121 — SHMALGAUZEN (O.I.). **In Russian.** (The deveolpment of gill vessels in the larvae of the Volga sturgeon). *C. R. Acad. Sci. U.R.S.S.* (195), 100, No. 3, 605-8.

1-07122 — STENER HAFFEN (K.). **Sur les besoins nutritifs spécifiques des gonades de l'embryon de pouletcultivées en milieux synthétiques.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 1018-9.

1-07123 — STRUDEL (G.). **Mécanisme de la genèse des vertèbres chez l'embryon de Poulet.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 17, 1725-6.

1-07124 — SWEDMARK (B.). **Développement d'un Gastrotriche Macrodasyoide,** Macrodasys affinis **Remaine.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1812-4.

1-07125 — VOY (A.). **Sur la "régénération directe" des pattes au cours du développement post-embryonnaire chez le Phasme femelle** (Clonopsis gallica **Charp.**). *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 681-3.

1-07126 — WOLFF (E.) et BRESCH (D.). **Sur les parabioses hétérogènes d'organes embryonnaires en culture in vitro.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 1014-6.

1-07127 — WOLFF (E.). **Les besions spécifiques en acides aminès de le syrinx de l'embryon de poulet, cultivée in vitro sur un milieu entièrement synthétique.** *C. R. Acad. Sci , Paris,* (1955), 240, No. 9, 1016-7.

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1-07128 — ALGOL (V.L.). **In Russian.** (The thermokinetic theories of muscle activity). *Adv. Mod. Biol., Moscow,* (1955), 39, No. 1, 77-94.

1-07129— ALLEN (R.D.). **The fertilization reaction in isolated cortical material from sea urchin eggs.** *Exp. Cell. Res.* (1955), 8, No. 2, 397-9.

1-07130 — AAES-JORGEENSEN (E.), ENGEL (P.F.), FUNCH (J.P.) and DAM (H.). **The role of fat n the diet of rats. 7. The influence of growth of diets supplemented with raw skim milk-linoliec acid or poth ;and of raw sasein compared with alcohol, extracted casein.** *Brit. J. Nutr.* (1955), 9, No. 1, 42-9.

1-07131 — ANDERSON (P.J.) and PETHICA (B.A.). **Necay of red cell cholinsterase activity with cell age.** *Biochem, Biophys, Acta.* (1955), 17, No. 1, 138-9.

1-07132 — ALTAMIRANO (M.), COATS (C.W.), GRUNDFEST (H.), and NACHMANSOHN (D.). **Electrical activity in electric tissue. I. Modifications of electrical activity by acetylcholine and related compounds.** *Biochem, Biophys, Acta.* (1955), 16, No. 4, 449-63.

1-07133 — BALESDENT-MARQUET (M-L.). **Castration temporaire aux rayons X et déterminisme des caractères sescuels temporaires chez le Crustacé Isopode** Asellus aquaticus **L.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1275-7.

1-07134 — BALCH (C.C.). **Sleep in ruminants.** *Nature, London,* (1955), 175, No. 4465, 940-1.

1-07135 — BARNES (G.E.). **The behaviour of** Anodonta cygnea **L., and its neurophysiological basis.** *J. Exp. Biol.* (1955), 32, No. 1, 158-74.

1-07136 — BATCHEN (J.M.), CHEESMAN (E.M.), COPPING (A.M.) and TRUSLER (A.D.). **The effect of vitamin B6 on the blood picture of the rat.** *Brit. J. Nutr.* (1955), 9, No. 1, 49-57e

1-07137 — BAXTER (D.W.) and OLSZESWKI (J.). **Respiratory responses evoked by electrical stimulation of pons and mesencephalon.** *J. Neurophysiol,* (1955), 28, No. 3, 276-87.

1-07138 — BEATON (J.R.). **Further studies on carbohydralé metabolism in the vitamin-B-depriued rat.** *Canad. J.* (1955), 3 No. 2, 161-6.

1-07139 — BERGERET (B.), CHATAGNER (F.) and FROMAGEOT (C.). **Quelques relations entre le phosphate de pyridoxal et la décarboxylation de l'acide cystéinesulfinique par divers organes de rat normal ou du rat carencé en vitamine T.** *Biochem, Bipphys, Acta.* (1955), 17, No. 1, 128-35.

1-07140 — BINET (L.), JULLEIN (A.), RIPPLINGER (J.) et CARDOT (J.). **Sur une substance de choix, la glucosamine, pour assurer une survie de longue durée du coeur isolé d'**Helix pomatia. *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1294-6.

1-07141 — BLONDHEIM (S.H.). **Effect of probenecid on excretion of bromosulphthalein.** *J. Appl. Physiol,* (1955), 7, No. 5, 529-32.

1-07142 — BROOKS (CH. McC.), KOLZUMI (K.) and MALCOLM (J.L.). **Effects of changes in temperature on reactions of sminal cord.** *J. Neurophysiol,* (1955), 28, No. 3, 205-16.

1-07143 — BROZEK (J.), and GRANDE (F.). **Body compos ition and basal metabolism in man:Correlation analysis versus physiological approach.** *Hum. Biol.* (1955), 27, No. 1, 22-31.

1-07144 — CALET (C.) et JACQUOT (R.). **Influence de l'auréomycine sur la composition corporelle du Rat blanc.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1370-2.

1-07145 — CANIVENC (R.) et MAYER (G.). **Nidation retardée par brûlure chez la Ratte.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 11, 1273-5.

1-07146 — CARLISLE (D.), DUPONT-RAABE (M.) et KNOWLES (F.). **Recherches préliminaires relatives à la séparation et à la comparaison de substances chromactives des Crustacés et des Insectes.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 665-7.

1-07147 — CHAMORRO (A.) et MINZ (B.). **Sécretion d'ocytocine par l'hypothalamus sous l'influence de l'application d'adrénaline sur le cortex cérébral.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 12, 1368-70.

1-07148 — CHAUCHARD (P.) et MAZOUE (H.). **Les métachronoses conditionnées.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 1012-13.

1-07149 — CHITTLEBOROUGH (R.G.). **Aspects of reproduction in the male humpbac, whale** Megaptera nodosa **(Bonnaterre).** *Aust. J. Mar. Fr(shw. Res.* (1955), 6, No. 1, 1-29.

1-07150 — CONN (H.L.) Jr. and GOLDBERG (J.). **Accuracy of a radiopotassium dilution (Stewart principle) method for the measurement of cardiac output.** *J. Appl. Physiol,* (1955), 7, No. 5, 542-8.

1-07151 — CONSTANTINIDES (P.), SZASZ (G.), and DARRACH (M.). **The effect of heparin on the endogenous lipemia produced by protracted cortisone treatment in the rabbit.** *Canad. J.* (1955), 33, No. 2, 226-31.

1-07152 — CORABOEUF (E.), DISTEL (R.) et BOISTEL (J.). **L'activité électrique normale des différents tissus du coeur de chien.** *-C. R. Acad. Paris,* (1955), 240, No. 19, 1927-8.

1-07153 — CRAIG (F.N.). **Pulmonary ventilation during esc ercise and inhalation of carbon dioscide.** *J. Appl, Physiol,* (1955), 7, No. 5, 467-71.

1-07154 — CRAMPTON (G.H.). **Studies of motion sickness. XVII. Physiological changes accompanying sickness in man.** *J. Appl. Physiol,* (1955), 7, No. 5, 501-7.

1-07155 — DELGADO (J.M.R.). **Cerebral structures involved in in transmission and elaborat on of noxious stimulation.** *J. Neurophysiol,* (1955), 28, No. 3, 261-75.

1-07156 — DISCHE (Z.) and ASHWELL (G.). **Inhibition of anaerobic glycolysis in pigeon hemolysates by multivalent anions.** *Biochem, Biophys, Acta.* (1955), 17, No. 1, 56-66.

1-07157 — DI BIAGIO (F.) and GRUNDFEST (H.). **Afferent relations of inferior salivary nucleus II. Site of relay from hind limb afferents into dorsal spino-olivary tract in cat.** *J. Neurophysiol,* (1955), 28, No. 3, 299-308.

1-07158 — DOWNMQN (C.B.B.). **Skeletal muscle reflexes of splanchnic and intercostal nerve origin in acute spinal and decerebrate cats.** *J. Neurophysiol,* (1955), 28, No. 3, 217-35.

1-07159 — DU PERRON (M.C.), JOLIET (J.) et ANDRIVET (S.). **Sur l'élimination de l'eau pulmonaire au cours de l'effort,** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1925-6.

1-07160 — DUJARRIC DE LA RIVIERE (R.), SAINT-PAUL (M.) et EYQUEM (A.). **Action de la phytoagglutinine de** Phaseolus vulgaris **sur les globules rouges de différents animaux.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 576-8.

1-07161 — EAYRS (J.T.) and LISHMAN (W.A.). **The maturation of behaviour in hypothyroidism and starvation.** *Brit. J. Anim. Behaviour,* (1955), 3, No. 1, 17-24.

1-07162 — ELLIOT (F.H.) and SCHALLY (A.V.). **Chromatography of steroids produced by rat adrenals** in vitro. *Canad. J.* (1955), 33, No. 2, 174-80.

1-07163 — ELLENBY (C.). **The permeability to the hatching factor of the cyst wall of the potato-root eelworm,** Heterodera rostochiensis **Wollenweber.** *Ann Appl. Biol.* (1955), 43, No. 1, 12-18.

1-07164 — ERSHOVA (I.P.). **In Ru sian.** (The defense reflexes of Citellus pygmaeus Pall. towards poisoned food). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 825-8.

1-07165 — FAIRBAIRN (D.). **Embryonic and postembryonic changes in the lipids of** Ascaris lumbriciodes **eggs.** *Canad. J.* (1955), 33, No. 2, 122-9.

1-07166 — FAIRBAIRN (D.) and PASSEY (B.I.). **The lipid components in the viteiline membrane of** Ascaris lumbricoides **eggs.** *Canad. J.* (1955), 33, No. 2, 130-4.

1-07167 — FARHI (L.E.) and RAHN (H.). **Gas stroes of the body and the unsteady state.** *J. Appl. Physiol,* (1955), 7, No. 5, 272-84.

1-07168 — FISCHER (M.I.), TIKKALA (A.O.) and MAWSON (C.A.). **Zinc, carbonic anhydrase, and phosphatase in the prostatic glands of the rat.** *Canad. J.* (1955), 33, No. 2, 181-90.

1-07169 — FOLEY (J.). **Benign forms of intracranial hypertension- "to ic" and "otitic" hydrocephalus.** *Brain,* (1955), 78, No. 1,1.

1-07170 — GARN (S.M.) and HARPER (R.V.). **Fat accumulation and weight gain in the adult male.** *Hum. Biol.* (1955), 27, No. 1, 39-49.

1-07171 — GELFAN (S.) and TARLOV (I.M.). **Differential vulnerability of spinal cord structures to anoxia.** *J. Neurophysiol,* (1955), 28, No. 2, 170-88.

1-07172 — GERNANDT (B.E.) and THULIN (C. A.). **Reciprocal effects upon spinal motoneurons from stimulation of bulber reticular formation.** *J. Neurophysiol,* (1955), 28, No. 2, 113-29.

1-07173 — GORBUNOV (V.M.). **In Russian.** (Structure and work of the lacteal gland of the cow). *Adv. Mod. Biol., Moscow,* (1955), 39, No. 1, 95-110.

1-07174 — GORDON (M.W.) and NURNBERGER (J.I.). **Acute cold-induced changes in cellular protion and nucleic acids in rat liver and brain.** *Exp. Cell. Res.* (1955), 8, No. 2, 279-304.

1-07175 — GRIESE (A.C.), IVERSON (R.M.), SANDERS (R. T.) and BORS (J.P.). **Peroxide and ultrabiolet radiation effects.** *Exp. Cell. Res.* (1955), 8, No. 2, 369-86.

1-07176 — HAPANEN (L.) and SKOGLUND (C.R.). **Display of pulse intervals in neurophysiological experiments.** *Nature, London,* (1955), 175, No. 4463, 858-9.

1-07177 — HALEVY (S.), DIAMANT (E.J.) and GUGGENHEIM (K.). **The effect of antibiotics on the 'metabolism ofnicotinic acid, biotin and folic acid in rats.** *Brit. J. Nutr.* (1955), 9, No. 1, 57-62.

1-07178 — HANDFORD (S.W.), SMYTHE (C.McC.), GIMORE (J.P.), LEOPOLD (R.S.), KATHAN (R.H.) and ARM (H.G.). **Glycerol pectate for plasma volume replacement and expansion: An experimental study.** *J. Appl. Physiol,* (1955), 7, Noi 5, 553-76.

1-07179 — NAHKINSON (J.), NAMIN (P.) and OCHS (S.). **Cortical and subcortical systems inhibiting the knee jerk in the cat.** *Brain,* (1955), 78, No. 1, 133-47.

1-07180 — HARTMANN (R.C.), MENG (J.C.), THORNE (C.B.) and KALMAN (S.). **Lipemia-clearing and anticoagulant effects of small amounts of heparin.** *J. Appl. Physiol,* (1955), 7, No. 5, 549-52.

1-07181 — HARVEY (R.B.) and SCHILLING (J.A.). **Measurement of lung volume by rapid decompression.** *J. Appl. Physiol,* (1955), 7, No. 5, 496-500.

1-07182 — JACQUEZ (J.A.) and KUPPENHEIM (H.F.). **Spectral reflectance of human skin in the redion** 235-1000**Mu.** *J. Appl. Physiol,* (1955), 7, No. 5, 523-8.

1-07183 — JOHNSON (B.). **Strychnine paroxysms in brain stem. I. -Anatomical distribuion.** *J. Neurophysiol,* (1955), 28, No. 2, 189-99.

1-07184 — JONSE (J.D.). **Observations on the respiratory physiology and on the haemoglobin of the polychaete genus** Nephthys, **with special reference to** N. hombergii **(Aud. et M. (Edw.).** *J. Exp. Biol.* (1955), 32, No. 1, 110-25.

1-07185 — JULIEN (A.), RIPPLINGER (J.) et JOLY (M.). **L'automatisme du coeur de l'Escargot** (Helix pomatia) **est conditionné par la présence de substances excito-mortices:leur role physiologique.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 8, 911-3.

1-07186 — KALMUS (H.). **The discrimination by the nose of the dog of individual human odours and in particular of the odours of twins.** *Brit. J. Anim. Behaviour,* (1955), 3, No. 1, 25-31.

1-07187 — KANTER (G.S.). **Heat and excertion in man.** *J. Appl. Physiol,* (1955), 7, No. 5, 533-6.

1-01788 — KAPLAN (J.G.). **The alteration of intracellular enzymes. I. Yeast catalase and the Euler effect.** *Exp. Cell. Res.* (1955), 8, No. 2, 305-28.

1-07189 — KATSUDI (Y.) and UCHIYAMA (H.). **Note on the hair cell potential of the ear of fish.** *Proc. Jap. Acad.* (1955), 31, No. 2, 99.

1-07190 — KENNARD (M.A.). **Effect of bilateral ablation of cingulate area on behaviuor of cats.** *J. Neurophysiol,* (1955) 28, No. 2, 159-69.

1-07191 — KIHARA (H.K.), AMANO (M.), IKEMOTO (H.) and SIBATANI (A.). **The rate of pentosenucleic acid replace- in the pancreas.** *Biochem, Biophys, Acta.* (1955), 17, No. 1, 143-4.

1-07192 — KING (R.C.). **The effect of a yeast upon the incorpora of phosphorus into the tissue of adult fruit flies.** *Evolution,* (1955), 9, No. 1, 93-3.

1-07193 — KIRSCHENBLATT (Ya. D.). **In Russian.** (Change in the function of the ovaries under the inffluence of the nervous system). *Adv. Mod. Biol., Moscow,* (1955), 39, No. 2, 183-95.

1-07194 — KLEMM (G.H.) and ROBENSON (K.W.). **The heat tolerance of two breeds of calves from 1 to 12 months of age.** *Aust. J. Agric. Res.* (1955), 6, No. 2, 350-64.

1-07195 — KORJEUV (P.A.). **In Russian.** (Respiratory function of blood and the skeleton of the vertibrates). *Adv. Mod. Biol., Moscow,* (1955), 39, No. 2, 163-82.

1-07196 — KOTAKE (Y.) and INOUYE (K.). **Studies on the effect of tryptophan and its metabolite with regard to adrenalectomized rat. I. Survival and prolongation of life with the aid of oral administration of tryptophan of its metabolite, anthranilic acid with regard to adminstration of tryptophan or its metabolite, acid with regard to adrenalectomized rat.** *Proc. Jap. Acad.* (1955), 31, No. 2, 100-5.

1-07197 — KOWALEWSK (K.), MOONEY (A.W.) and HYDE (H.A.). **Effect of ligation of common duct on the radioiodine uptake by the thyroid of rats.** *Canad. J.* (1955), 33, No. 2, 156-60.

1-07198 — LAGET (M.P.). **Sur quelques points relatifs à la physiologie des émetteurs phonatoires dans la série animale.** *Ann. Oto. Larying.* (1955), 71, No. 1, 97.

1-07199 — LANDIS (C.), CLAUSEN (J.) and GJESVIK (A.). **dbect of varying stimulu conditions on the flickerfusion threshold when nitroglycerin or the cold pressor test was employed.** *J. Appl. Physiol,* (1955), 7, No. 5, 513-8.

1-07200 — LOPUSHANSKY (P.I.) and MOLOTKOVSKY (G. Kh.). **In Russian.** (The intensity of respiration of metameric fortions of the walnut and the phenomenon of polarity). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1179-82.

1-07201 — LOPYRIN (A.I.) and LOGINOVA (N.V.). **In Russian.** (Theory and practice of the fertilization of females with mixed semen). *Adv. Mod. Biol., Moscow,* (1955), 39, No. 2,212-227.

1-07202 — MANKHOUSE (F.C.). **An investigation of the coagulation defect brought about in rabbits and ogs by the intravenous injection of papain.** *Canad. J.* (1955), 33, No. 2, 112-21.

1-07203 — MANN (S.O.) and OXFORD (A.E.). **Relationships between viable saccharolytic bacteria in rumen and abomasum of the young calf and kid.** *J. Gen. Microbiol,* (1955), 12, No. 1, 140-6.

1-07204 — MATTHEWS (G.V.T.). **An investigation of the 'chronometer' factor in bird navigation.** *J. Exp. Biol.* (1955), 32, No. 1, 39-58.

1-07205 — MAYER-ARENDT (E.) und MAYER-ARENDT (J.). **Grundlagen der photometrie mit wechsellicht.** *Exp. Cell. Res.* (1955), 8, No. 2, 387-93.

1-07206 — MAY (R.M.) et MUGARD (H.). **Action de l'ingestion de poudre de thyroide sur la multiplication cellulaire dans l'encéphale des tétards de Rana temporaria.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 677-9.

1-07207 — MAZIA (D.) and PRESCOTT (D.M.). **The role of the nucleus in protein synthesis in** Amoeba. *Biochem, Biophys Acta.* (1955), 17, No. 1, 23-34.

1-07208 — McLAUGHLIN (J.), SCHIFFMAN (G.) and SZENT-GYORGYI (A.). **Inosine phosphates in muscle.** *Biochem, Biophys, Acta.* (1955), 17, No. 1, 160.

1-07209 — McILROY (M.B.), MEAD (J.), SELVERSTONE (N.J.) and RADFORD (E.P.). **Measurement of lung tissue viscous viscous resistance using gases of equal kinematic viscosity.** *J. Appl. Physiol,* (1955), 7, No. 5, 485-90.

1-07120 — MEAD (J.), McILROY (M.B.), SELVERSTONE (N.J.) and KRIETE (B.C.). **Measurement of intraesophageal pressure.** *J. Appl. Physiol,* (1955), 7, No. 5, 491-5.

1-07211 — MEEHAN (J.P.). **Body heat production and surface temperatures in response to cold stimulus.** *J. Appl. Physiol,* (1955), 7, No. 5 537)41.

1-07212 — MICHEL (M.) et FANCOIS (A-CH.). **Relation entre l'influence des antibiotiques sur la croissance du porc et l'inhibition des désaminases de la flore intestinale.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 808-10.

1-07213 — MIGOCOVSKY (B.B.). **Inhibition of cholesterol forby rat liver homogenates.** *Canad. J.* (1955), 33, No. 2, 135-8.

1-07214 — NEWTH (D.R.) and ROSS (D.M.). **On the reaction to light of** Myxine glutinosa **L.** *J. Ecp. Biol.* (1955), 32, No. 1, 4-21.

1-07215 — NIKIFOROV (N.D.). **In Russian.** (The gas and albumin metabolism of the young salmon). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 1025-7.

1-07216 — OGILVIE (J.C.), RYAN (J.E.B.), COWAN (R.F.) and QUERENGESSER (E.I.). **Interrelations and reproducibility of measures of absolute light threeshold and scotopic acuity.** *J. Appl. Physiol,* (1955), 7, No. 5, 519-22.

1-07217 — PASSMORE (R.), MEIKLEJOHN (A.P.), DEWAR (A.D.) and THOW (R.K.). **An analysis of the gain in weight of overfed thin young men.** *Brit. J. Nutr.* (1955), 9, No. 1, 27-37.

1-07218 — PASSMORE (R.), MEIKLEJOHN (A.P.), DEWAR (A.D.). and THOW (R.K). **Energy utilization in overfed thin young men.** *Brit. J. Nutr.* (1955), 8, No. 1, 20-7.

1-07219 — PELC (R.S.) and GLUCKSMANN (A.). **Sulphate metabolism in the cartilage of the trachea pinna and xiphoid process of the adult mouse as indi.ated by autoradiographs.** *Exp. Cell. Res.* (1955), 8, No. 2, 336-44.

1-07220 — PERCIERPAROT (L.) et TUCHMANN-DUP ESSIS (H.). **Influence de la réserpine sur le cycle oestral de la ratte.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1935-6.

1-07221 — PIGON (A.) and WEGLARSKA (B.). **Anabiosis in tardigrada metabolism and humidity** *Bull. Acad.. Polonaise. Sci.* (1955), 3, No. 1, 31-4.

1-07222 — PITT-RIVERS (R.) et THIBAULT (O.). **Les dérivés acétiques de la thyroxine et de la triiodothyronine catalysent les oxydations cellulaires sans temps de latence.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 668-70.

1-07223 — PONDER (E.) end PONDER (R.V.). **Electrophoretic mobility of red cells and thier ghosts as observed with improved apparatus.** *J. Exp. Biol.* (1955), 32, No. 1, 175-82.

1-07224 — POPLE (W.) and EWER (D.W.). **Studies on the myoneural physiology of Echinodermata II. Circumoral conduction in** Cucumaria. *J. Exp. Biol.* (1955), 32, No. 1, 59-69.

1-07225 — POPOV (C.). **Elaboration des relations corticales:le foyer d'excitation supplémentaire.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1929-31.

1-07226 — POPOV (C.). **Sur l'accroissement de la sensation lumineuse par la stimulation sonore, étudiée par la méthode électroencéphalographique et par la méthode des images consécutives.** *C. R. Acad. Sci.,* (1955), 240, No. 11, 1268-71.

1-07227 — POPOV (N), ET POPOV (C.). **Du mécanisme de la formation des réflexes conditionnés basé sur la cycloghronie. Nouveau schéma du conditionnement.** *C. R. Acad. Sci. Paris,* (1955), 240, No. 19, 1243-5.

1-07228 — PRTER (R.). **Antidromic conduction of volleys in pyramidal tract.** *J. Neurophysiol,* (1955), 28, No. 2, 138-50.

1-07229 — POWELL (T.P.S.) and COWAN (W.M.). **An experimental study of the efferent connexions of the hippocampus.** *Brain,* (1955), 78, No. 1, 115-32.

1-07230 — PRATT (J.G.). **An investigation of homing ability in pigeons without previous homing experience.** *J. Exp. Biol.* (1955), 32, No. 1, 70-83.

1-07231 — PRATT (J.G.) and THOULESS (R.H) **Homing orientation in pigeons in relation to opoortunity of observe the sun befoie release.** *J. Exp. Bioj·* (1955,) 32· No. 1, 140-57

1-07232 — PRIBRAM (K.H.). **Lesions of «frontal eye «elds" and delayed response of baboons.** *J. Neurophysiol,* (1955), 28 No. 2, 105-12.

1-07233 — PURPURA (D.P.). **Further analysis of evoked «secondary discharge", a study in reticulo-cortical relations.** *J. Neuro physiol,* (1955), 28, No. 3, 246-60.

1-07234 — ROSE (J.C.), BROIDA (H.P.), HUFNAGEL (CH. A.) GILLESPIE (J.F.), RABILE (P.J.) and FREIS (E.D.). **A method for the study ofthe circulation in the dog using a mechanical left ventr cle.** *J. Appl. Physiol,* (1955), 7, No. 5, 580-4.

1-07235 — SCHINCKEL (P.G.). **The relationship of skin follicle development to growth rate in sheep.** *Aust. J. Agric. Res.* (1955), 6, No. 2, 308-23.

1-07236 — SCHNEYER (L.H.) and LEVIN (L.K.). **Rate of secretion by individual salivary gland pairs of man under conditions of reduced exogenous stimulaion.** *J. Appl. Physiol,* (1955), 7, No. 5, 508-12.

1-07237 — SEGUNDO (J.P.), NAQUET (R.) and BUSER (P.). **Effects of cortical stimulation on electrocort cal activity in monkeys.** *J. Neurophysiol,* (1955), 28, No. 3, 236-45.

1-07238 — SHULYNDIN (A.F.). **In Russian.** (The inheritance of the capacity for sugar storage in the interspecial hybrids of of wheat in 3 and 4 generations). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 1005-8.

1-07239 — SILBERBERG (R.) and SILBERBERG (M.). **Life span of mice fed a high fat diet at various ages.** *Canad. J.* (1955), 33, No. 2, 167-73.

1-07240 — STAINSBY (W.N.), FALES (J.T.) and LILIENTHAL Jr. (J.L.). **A rapid spectrophotometric method for determining oxygen content of dog's blood.** *J. Appl. Physiol,* (1955), 7, No. 5, 577-9.

1-07241 — STEVEN (D.M). **Eàperiments on the light sence of the the hag, -Myxine glutinosa L.** *J. Exp. Biol.* (1955), 32, No. 1, 22-38.

1-07242 — STEVEN (D.M.). **Transference of«imprinting" in a wild gosling.** *Brit. J. Anim. Behaviour,* (1955), 3, No. 1, 15-6.

1-07243 — TASAKI (I.) DAVIS (H.). **Electric responses of individual nerve elements in cochlear nucleus to sound stimulation (guinea pig).** *J. Neurophysiol,* (1955), 28, No. 2, 151-8.

1-07244 . . TAUC (L.). **Divers aspects de l'activité électrique spontanée de la cellule nerveuse du ganglion abdominal de l'aplylie.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 672-4.

1-07245 — TEASDALL (R.D.) and STAVRAKY (G.W.). **Tonic adaptions in deafferented limbs of the cat.** *Canad. J.* (1955), 33, No. 2, 139-55.

1-07246 — TRIBE (D.E.). **Choice of diet by rats. 4. The choice of purified food constituents during growth, pregnancy and lactation.** *Brit. J. Nutr.* (1955), 9, No. 1, 103-9.

1-07247 — TRIBE (D.E.) and GORDON (J.G.). **Choice of diet by rats. 3. The importance of the sense of smell in the choice of diets de«cient in the vitamin B comples.** *Brit. J. Nutr.* (1955), 9, No. 1, 1-4.

1-07248 — WANG (R.I.H.) and SONNENSCHEIN (R.R.). **pH of cerebral cortex during induced convulsions.** *J. Neurophysiol,* (1955), 28, No. 2, 130-7.

1-07249 — WERTH (G.). **Zur biologischen wirkung von cytochrom C.** (Sur l'action biologique de citochrome c.). *Biochem, Biophys, Actax.* (1955), 17, No. 1, 144-5.

1-07250 — WEBER (G.), ALLARD (C.), DE LAMIRANDE (G.) and CANTERO (A.). **Increased liver glucose-6-phosphatese phosphatese activity after cortisone administration.** *Biochem, Biophys, Acta.* (1955), 16, No. 4, 618-9.

1-07251 — WRODEN (A.N.) and WATERHOUSE (C.E.). **The effect of environmental temperature on the urinary excretion of riboflavin by the dog.** *Brit. J. Nutr.* (1955), 9, No. 1, 5-10.

1-07252 — ZANCHETTI (A.) and BOOKHART (J.M.). **Measurement of electrical responsiveness of cortico-spinal efferents in cat and monkey.** *J. Neurophysiol,* (1955), 28, No. 3, 288-98.

G 11. ECOLOGY and BIOGEOGRAPHY.

1-07253 — AITKEN (Y.). **Flower initiation in pasture legumes. I. Factors affecting flower initiation in** Trifolium subterraneum **L.** *Aust. J. Agric. Res.* (1955), 6, No. 2, 212-44.

1-07254 — AITKEN (Y.). **Flower initiation in pasture legumes. II. Geographical implications of cold temperature requirements of varieties of** Trifolium subterraneum **L.** *Aust. J. Agric. Res.* (1955), 6, No. 2, 245-57.

1-07255 — AITKEN (Y.). **Flower initiation in pasture legumes. III. Flower initiation in** Medicago tribuloides **Deser and other medics.** *Aust. J. Agric. Res.* (1955), 6, No. 2, 258-63.

1-07256 — BARLING (D.M.). **Some population studies in** Ranunculus bulbosus **L.** *J. Ecol.* (1955), 43, No. 1, 207-18.

1-07257 — BILIOTTI (E.). **Vie endoparasitaire et diapause chez** Phyryxe secunda **BB.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 8, 915-6.

1-07258 — BINET (M.P.). **Action du climat désertique sur le dévelopement, la forme la structure et la métabolism de** Zilla Macroptera **Coss.** *Rev. Gen.* (1955), No. 735, 245-318.

1-07259 — CALLAME (B.). **Sur la répartition de** Arenicola marina **L. dans les sédiments de la zone intercotidale.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1670-.

1-07260 — CORY (B.L.) and MANION (J.J.). **Ecology and hybridization in the genus Bufo in the Michigan-Indiana region.** *Evolution,* (1955), 9, No. 1, 42-51.

1-07261 — CURTIS (J.T.). **A note on recent work dealing with the spatial distribution in plants.** *J. Ecol.* (1955), 43, No. 1, 309.

1-07262 — EGOROV (N.S.) and POLIN (A.N.). **In Russian.** (Actinomycetes-antagonists in the soils of the middle Lena). *Microbiology, Moscow,* (1955), 24, No. 1, 67-72.

1-07263 — ELLENBY (C.). **The seasonal response of the potato-root elworm** Heterodera rostochiensis **Wollenweber: emergence of larvae throughout the year from cysts e posed to different temperature cycles.** *Ann. Appl. Biol.* (1955), 43, No. 1, 1-11.

1-07264 — DUSSART (B.) et JUGET (J.). **Sur l'écologie de quelques organismes limicoles du lac d'Annecy.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1233-5.

1-07265 — GILLHAM (M.E.). **Ecology of the Pembrokeshire Islands. III. The effect of grazing on the vegetation.** *-J. Ecol.* (1955), 43172-20 N 1o6..'

1-07266 — GIMINGHAM (C.H.). **A note on water-table sand movement and plant distribution in a North African oasis.** *J. Ecol.* (1955), 43, No. 1, 22-5.

1-07267 — GUILER (E.R.). **Australian intertidal belt-forming species in Tasmania.** *J. Ecol.* (1955), 43, No. 1, 138-48.

1-07268 — HAMEL (A.). **Esquisse ecologique des comtés de l'Islet et de Kamouraska.** *Canad. J. Bot.* (1955), 33, No. 3. 223-50.

1-07269 — HEPBURN (I.). **The vegetation of the old stone quarries at Collyweston. A urther study of the Northamptonshier Jurassic limestone.** *J. Ecol.* (1955), 43, No. 1, 74-9.

1-07270 — HOESTLANDT (H.). **Etude de populations de** Sphaeroma serratum **le long du littoral de la Grande-Bretagne.** *C. R. Acad. Sci., Paris,*)1955), 240, No. 8, 916-9.

1-07271 — HOESTLANDT (H.). **Limite nordique de l'extension d'un Crustacé marin de la faune lusitanienne,** Sphaeroma serratum. *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 683-6.

1-07272 — HOLDGATE (M.W.). **The vegetation of some springs and wet flushes on Tarn Moor near Orton, Westmorland.** *J. Ecol.* (1955), 43, No. 1, 80-9.

1-07273 — HUGHES (R.E.) and LINDLEY (D.V.). **Application of biometric methods to problems of classifcation in ecology.** *Nature, London,* (1955), 175, No. 4462, 806-7.

1-07274 — JONES (E.W.K.) and QASIM (S.Z.). **Responses of some marine plankton animals to changes in hydrostatic pressure.** *Nature, London,* (1955), 175, No. 4465, 941-2.

1-07275 — JUZE (A.P.) and SEMINA (G.I.). **In Russian.** (General rules of the distribution of diatoms in the plankton of the Behring Sea and in the upper layers of the bottom sediments). *-C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 579-182.

1-07276 — KACZMAREK (W.). **Zur Frage der faktoren welche die lokale Migration des Kartoffelkafers** (Leptinotarsa decomlineata). *Bull. Acad. Polonaise, Sci.* (1955), 3, No. 1, 15-20.

1-07277 — KOMAROVA (L.I.). **In Russian.** (Infiunce of external factors on thetemperature coeffIcient of the velocity of the acetonic-butyric fermentation). *Microbiology, Moscow,* (1955), 24, No. 2, 208-16.

1-07278 — KORENYKO (A.I.), KUCHAEVA (A.G.) and MUSHUSTINA (I.E.). **In Russian.** (The distribution of Actinomycetes-antagonists in the siol of the Kola peninsula). *Microbiology, Mo cow,* (1955), 24, No. 1, 62-6.

1-07279 — KRISS (A.E.) and BIRYUZOVA (V.I.). **In Russian.** (The vertical distribution of microorganisms in theKuril-Kamchatka depression of the Pacific Ocean). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 6, 1175-80.

1-07280 — LAZENBY (A.). **Germination and establishment of** Juncus effusus **L. The effect of different companion species and of variation in siol and fertility conditions.** *J. Ecol.* (1955), 43, No. 1, 103-19.

1-07281 — LEWIS (J.R.). **The mode of occurrence of the universal intertidal zones in Great Britain.** *J. Ecol.* (1955), 43, No. 1, 270-90.

1-07282 — LUND (J.W.G.). **Further observations on the seasonal cycle of** Melosra Italica **(EHR.) Kûtz. supbsp.** subarctica **O. Mûll.** *J. Ecol.* (1955), 43, No. 1, 90-102.

1-07283 — MANTEUFEL (A. Ya) and KOZLOVA (E.I.). **In Russian.** (Freely living nitrogen-flxing organisms in the steppe and forest siols ofthe Kamyshin, Stallingrad and Tinguty regions). *Microbiology, Moscow* (1955) 24, No. 1, 36-42.

1-07284 —McVEAN (D.N.). **Ecology of** Alnus glutinosa **L. Gaertn. I. Fruit formation.** *J. Ecol.* (1955), 43, No. 1, 46-60.

1-07285 — McVEAN (D.N.). **Ecology of** Alnus glutinosa **L. Gaertn. II. Seed distribution and germination.** *J. Ecol.* (1955), 43, No. 1, 61-71.

1-07286 — OVINGTON (J.D.). **Studies of the development of woodland conditions under different trees. III. The ground flora.** *J. Ecol.* (1955). 43, No. 1, 1-21.

1-07287 — POORE)M.E.D·). **The use of phytosociological methods in ecological investigations. I. The Braun-Blanquet system.** *-J. Ecol.* (1955), 43, No. 1 226-44.

1-07288 — POORE (M.E.D.). **The use of phytosociological methods in ecological investigations. II. Practical issues involved in an attempt to apply the Braun-Blanquet system.** *J. Ecol.* (1955) 43, No. 1, 245-69.

1-07289 — PUJOS (A.). **Sur un sous-étage de végétation méditerranéen aride froid j Chénopodiacées et la présence de l'étage méditerranéen saharien dans le Bassin de la Moulouya (Marco).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 1010-12.

1-07290 — QUEZEL (P.). **Résultats sommaires de quatre années d'exploration botanique des sommets des atlas marocains.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 663-5.

1-07291 — RAO (CB.). **On the distribution of Algae in a group of six small ponds. II. Algal perioclicity.** *J. Ecol.* (1955), 43,, No. ll. No. 291-308.

1-07292 — RICHARDS (P.W.). **The secondary succession in the tropical rain forest.** *Sci. Progr.* (1955), 43, No. 169, 45-57.

1-07293 — RITCHIE(J.C.). **A note on the distribution of** Primula scotica **Hook.** *-J. Ecol.* (1955), 43, No. 1, 39-45.

1-07294 — SCHAMALHAUSEN (O.I.). **In Russian.** (Exologic-morphological peculiarities in the development of the gill-apparatus of the larvae of the Volga sturgeon). *C. R. Acad. Sc U.R.S.S.* (1955), 100, No. 4, 837-9.

1-07295 — SILLANS (R.). **De la diversité des territoires phytogéographiques Ouest-oubanquins.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 8, 908-9.

1-07296 — SILSBURY (J.H.) and BRITTAN (N.H.). **Distribution and ecology of the genus** Kennedya **Vent in Western Australia.** *Aust. J. Bot.* (1955), 3, No. 1, 113-35.

1-07297 — SMYTH (J.C.). **A study of the benthic diatoms of Loch Sween** (Argyll). *J. Ecol.* (1955), 43, No. 1, 149-71.

1-07298 — SOKOLOV (D.F.). **In Russian.** (The role of Julus sabulosus in the decomposition of organic material in the regions of the steppe planted with trees). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 563-6.

1-07299 — STEELE (B.). **Soil pH and base status as factors in the distribution of calcicoles.** *J. Ecol.* (1955), 43 No. 1, 120-32.

1–07300 — SVENDSEN (J.A.). **Earthworm population studies a comparison of sampling methods.** *Nature, London,* (1955), 175, No. 4463, 864.

1–07301 — TAYLOR (B.W.). **Terrace formation on Macquarei Island.** *J. Ecole.* (1955), 43, No. 1, 133-7.

1–07302 — THOROLD (CA.(. **Observations on** Theobroma cacao **in Fernando Po.** *J. Ecole* (1955), 43, No. 1, 219-25.

1–07303 — VERRIER (M-L.). **La répartition en altitude des Ephèmères de la faune de France.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 6, 686-7.

1–07304 — WALKER (F.T.) and RICHARDSON (W.D.). **An ecological investigation of** Laminaria cloustoni edm. (L.hyperborea **Fodl.) around Scotland.** *J. Ecol.* (1955), 43, No. 1, 26-38.

1–07305 — WILLIAMS (O.B.). **Studies in the ecology of the riverine plain. I. The gilgai microrelief and associated flora.** *Aust. J. Bot.* (1955), 3, No. 1, 99-112.

1–07306 — WINSLOW (R.D.). **The hatching responses of some root eelworms of the genus** Heterodera. *Ann. Appl. Biol.* (1955), 43, No. 1, 19-36.

G 12. ANTHROPOLOGY.

1–07307 — ARAMBOURG (C.). **Sur l'attitude, en station verticale des Néanderthaliens.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 804-6.

H. Medical Sciences

1–07308 — **The second annual symposium on antibiotics. A brief survey.** *Antibiotic, Med.*-(1955), 1, No. 1, 37-9.

1–07309 — AAVIK (O.R.). **Cholinesterases in human Skin.** *invest. Derm.* (1955), 24, No. 2, 103-6.

1–07310 — ADAMS (T.R.) and ADELSTEIN (B.). **Mesenteric occlusion. A brief analysis of ten cases with a reported pour patients who survived following operation.** *Amer. Surg.* (1955), 21, No. , 238-41.

1–079311 — AHVENAINEN (E.K.). **Neonatal pneumonia.** *Antibiotic, Med.* (1955), 1, No.-3, 166.

1–07312 — ALLAMANIS (J.). **Paper electrophoresis of serum proteins in Coley's anaemia and Sicle cell anaemia.** *Acta. Paedait., Stockh.* (1955), 44, No. 2, 122-7.

1–07313 — AMADO (J.H.). **Modifications des caractéristiques phonatoirs sous l'influence d'états endocriniens.** *Ann. Oto. Laryng.* (1955), -71, No. 1, 96.

1–07314 — ANDERSEEN (P.H.). **The prevention of haemolytic transfusion reactions.** *Dan. Med. Bull.* (1955), 2, No. 2, 44.

1–7315 — ANDERSON (B.M.) and KINSELL (L.W.). **Anesthetic management during hypophysectomy for fulminant «Juvenil" diabetes.** *Anestiosiology*, (1955), 16, No. 3, 375-8.

1–07316 — ANDELMAN (M.B.) and FISHBEIN (W.I.). **Clinical study of orally administered pencillin.** *Antibiolic, Med.* (1955), 1, No. 3, 136-8.

1–07317 — ARNOLD (J.G.) and DAMERON (T.B.). **Kyphoscoliosis with paraplegia.** *Amer. Surg.* (1955 , 21, No. 3, 268-77.

1–07318 — ARTHUR (R.P.) and SHELLEY (W.B.). **Experimental evidence for an enzymatic basis for itching in man.** *Nature, London*, (1955), 175, No. 4464, 901-2.

1–07319 — ASH (W.H.). **The lateral approach for spinal anesthesia.** *Anesthesiology*, (1955), 16, No. 3, 445-53.

1–07320 — ASSCHER (A.W.) and TURNER (C.J.). **Vaginal suphydryl and disulphide groups during the OEstrous cycle of the mouse.** *Nature, London*, (1955), 175, No. 4464, 990-1.

1–07321 — BADEN (H.), FABRICIUS (J.) and SECHER (O.). **Management of the patient during mitral valvotomy.** *Dan. Med. Bull.* (1955), 2, No. 2, 20-8.

1–07322 — BALAKRISHNAN (S.) and RAJAGOPALAN (R.). **Influence of some typical diets on the intestinal flora and thiamin. synthesis in rats.** *Indian. J. Med. Res.* (1955), 43, No. 1, 31-8e

1–07323 — BARNES (T.G.), GANEY (J.B.) and YEAGER (G.H.). **Restoration of arterial continuity folowing sudden interruption: Autogenous grafts, direct anastomosis, case reports.** *Amer. Surg.* (1955), 21, No. 1, 17-24.

1–07324 — BARLOW (A.J.E.) and CHATTAWAY (F.W.). **The attack of chemically modifed keratin by certain dermatophytes.** *J. Invest. Derm.* (1955), 24, No.-1, 65-75.

1–07325 — BARROWS (L.J.), HUNTER (F.T.) and BANKER (B.Q.). **The nature and clinical signifycance of pigments in the cerebrospinal fluid.**-*Brain.* (1955), 78, No. 1, 59, 80.

1–07326 — BARR (M.). DELAVA (S.) and ZETTERSTROM (R.). **Studies of the anemia in ulcerative colitis with special reference to the iron metabolism** *Acta. Paediat., Stockh.* (1955), 44, No. 1, -62-72.

1–07327 — BEACONSFIELD (P.) and MESSENT (D.). **Blood flow after general anaesthesia in sympathectomiezd lims.** *Anesthisiology*, (1955), 16, No. 3, 428-33.

1–07328 — BELLVILLE (J.W.) and ARTUSIO (J.F.) Jr. **Electroencephalographic pattern and frequency spectrum analysis during diethyl either analgesia.** *Anesthesiology*, (1955), 16, No. 3, 379-85.

1–07329 — BERGNER (R.P.). **Cardiac arrest:Some etiological considerations with reports of seventeen cases.** *Anesthesiology*, (1955), 16, No. 2, 177-89.

1–07330 — BETCHER (A.M.) and TANG (Z.T.). **Pyribenzamine: Evaluation of effectiveness as an analgesic agent in regional, anesthesia.** *Anesthesiology*, (1955), 16, No. 2, 214-23.

1–07331 — BERTELSEN (A.), BURN (O.), CHRISTENSEN (I.), GLISTRUP (E.) GREGERSEN (P.L.) and JORGENSEN (J.B.). **Treatment of pseudarthrosis of the ling bones in Denmark.** *Dan. Med. Bull.* (1955), 2, No. 1, 1-8.

1–07332 — BERNHARD (W.) et BAUER (A.). **Mise en évidence de corpuscules d'aspect virusal dans des tumerus mammaires de la Souris. Etude au microscope électronique.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 12, 1380-2.

1–07333 — BETHELL (F.H.), CASTLE (W.B.), -SCHEWARTZ (S.O.), WINTROBE (M.M.), and DAMESHEK (W.). **Panels in therapy: I. The use of intricsic factor -B12 combinations in the treatment of pernicious anemia.** *Blood.* (1955), 10, No. 4,-377-9.

1–07334 — BHATE (D.S.). **Punrilin. a new antibiotic from** Bacillus pumilus. *Nature, London*, (1955), 175, No. 4462. -816-7.

1–07335 — BLACHLY (P.H.) and BROOKHART (J.M.). **Studies on the analeptic action of electrical stimulation in barbiturate poisoning.** *Anesthesiology*, (1955), 16, No. 2, 151-67.

1–07336 — BLOCH (M.A.). **Rétrécissement cicatriciel de l'oesophage.** *Ann.-Oto. Larying.* (1955), 71, No. 1, 77.

1–07337 — BLOOM (R.E.), WOODS (S.) and NICOLAIDES (H.). **Hair fat composition in early male pattern alopecia.** -*J. Invest. Derm.* (1955), 24, No. -2, 97-101.

1–07338 — BLOXSOME (A.). **Resuscitation of the newborn infant.** *Anesthesiology*, (1955), 16, No. 1, 41-7.

1–07339 — BLUNDELL (A.E.), BODELL (B.), ANDORKO (J.E.), SWEENEY (J.C.) and ANSBRO-(F.P.). **Clinical evaluation of druges used in obraining lumber epidural anesthesia.** *Anesthesiology*, (1955), 16, No. 3, 386-93.

1-07340 — BORDERS (R.W.), STEPHEN (C.R.) NOWELL (K.W.) and MARTIN (R.). **The interrelationship of succinylcholine and the blood cholinesterases during anesthesia.** *Anesthesiology*, (1955), 16, No. 3, 301-22.

1-07341 — BOUCHET (M.M.), HUET (P.C.), DULAC (G.) et PAILLET. **Contribution à l'étude systématique de la mobilité dans les incidences classiques de profil et de face.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 18-21.

1-07342 — BOUJNAH (A.) et DELAUNAY (A.). **Modifications apportées par le salicylate de sodium aux réactions sérologiques de la syphilis.** *Rev. Immunol.* (1955), 19, No. 12, 53-7.

1-07343 — BARNNICK (T.L.), HEILMAN (F.R.), NICHOLS (D.R.) and MARTIN (W.J.). **Comparsion of levels of carbomycin A, carbomycin B, and erthromycin in serum and thyroid tissue.** *Antibiotic, Med.*-(1955), 1, No. 3, 131-5.

1-07344 — BROWN (R.B.), GERBER (M.L.) and SULIVAN (M.B.). **Radical resection versus local excision for malignant polyps of the colon and rectum.** *Amer. Surg.* (1955), 21, No. 1, 25-31.

1-07345 — BUCKINGER (R.H.) HOOKINGS (C.E.) and GARSON (W.). **A preliminary report on the effect of carbomycin in early syphilis.** *Antibiotic, Med.* (1955), 1, No. 2, 100-3.

1-07346 — BURNET (M.). **The riddle of influenza virus.** *Endeavour*, (1955), 14, No. 53, 5-10.

1-07347 — BUSCH (E.), HALMSTED (O.), LUND (O.), NEVIN (J.) and POVL THELLE. **Orbitomedial frontal undercutting in mental disease.** *Dans. Med. Bull.* (1955), 2, No. 2, 10-20.

1-07348 — RUITER (M.) and WENTHOLT (H.M.M.). **Isolation of a pleuropneumonia like organism from a skin lesion associated with a fusospirochetal flora.** *J. Invest. Derm.* (1955), 24, No. 1, 31-4.

1-07349 — CAUJOLLE (F.), LESBRE (M.), BRU (A.), MEYNIER (D.) et BRU (Y.). **Répartition du Sn après administration au chien de tétraéthylétain marqué.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 18, 1829-30.

1-07350 — CAUJOLLE (F.), LESBRE (M.), MEYNIER (D.) et BLAIZOT (A.). **Toxicité comparée du n-propylstannane et de l'isoporpylstannane symétriques.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 17, 1732-4.

1-07351 — CHAKARVARTY (R.N.), DEY (U.N.) and MUKERJI (B.). **Preliminary observation on experimental cholesterol atheroscleroiss in rabbits with special reference to the reticulin structure of the arterial wall.** *Indian. J. Med. Res.* (1955), 43, No. 1, 79-88.

1-07352 — CHARRLES (D.). **Placental transmission of antibiotics.** *Antibiotic, Med.* (1955), 1, No. 3, 166-7.

1-07353 — CHOREMIS (C.), ZANNOS (L.) and DENTAKIS (C.L.). **Alkali-resistant Haemoglobin in thalassaemia.** -*Acta. Paediat., Stockh.* (1955), 44, No. 2, 116-23.

1-07354 — CLEMO (G.R.) and MILLER (E.W.). **The carcinogenic action of city smoke.** *Chem. Ind.* (1955), No. 7, 35.

1-07355 — CODECA (M.). **Tyrothricin -choloramphenicol ointement in pyodermas.** *Antibiotic, Med.* (1955), 1, No. 2, 108.

1-07356 — COWLEY (R.A.), SCHELIS (L.) and HACKETT (P.). **The evaluation and care of the patient for cardiac surgery.** *Amer. Surg.* (1955), 21, No. 3, 242-5.

1-07357 — DAVIS (D.A.), ELLIS (F.C.), REESE (N.O.) and GROSSKREUTZ (D.C.). **The prolonged effects of succinylcholine 'and some possible explanations for these phenomena.** *Anesthesiology*, (1955), 16l No. 3,-333-42.

1-07358 — DE (H.N.). **Studies on cholinesterase. Effects of thiamine on the serum cholinesterase activity of human blood.** *Indian J. Med. Res.* (1955), 43, No. 1, -71-8.

1-07359 — DECROIX (G.) et HAYM (H.). **Otites externes et hydrocortisone.** *Ann. Oto. Larying.* (1955), 71, No. 88-91.

1-07360 — DEL POZO (E.C.), GONZALEZ-OCHCA (A.), VENEGAS (S.R.), MARTINEZ-BAEZ (M.) and ALCARAZ (M.). **Long term treatment of leproly with cortisone.** *J. Invest. Derm.* (1955), 24, No. 1, 51-6.

1-07361 — DE LEON (E.P.). **Preliminary study of treatment with neomycin of diarrhea caused by shigella and salmonella.** *Antibiotic, Med.* (1955), 1, No. 1, 20-1.

1-07362 — DELAUNAY (A.) et ROQUEFEUIL (C.). **Etude du choc anaphylactique chez le cobaye. Modifications du pouvoir déchaînant du sérum de cheval par traitement chimique.** (Action (1955), 19, No. 12, 27-45.

1-07363 — DELAUNAY (A.), HENON (M.), PELLETIER (M.) et BAGGI (G.). **Sur l'agglutination des grains d'amidon par différents sérums, plus précisément par le sérum de lapin.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 21, 2094-6.

1-07364 — DELAUNAY (A.) et ROQUEFEUIL (C.). **Modifications apportées par le salicylate de sodium et différents corps àl'aspect physique du lait, du blanc d'oef et de la guanidine, diverses préparations d'amidon.** *Rev. Immunol.* (1955), 19, No. 12, 46-52.

1-07365 — DEMAREST (M.M.). **L'art musical peut-il être reconstruit sur le plan d'une linguistique de l'affectivité.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 101.

1-07366 — ROBERTIS (E.), CANZANI (R.), GASIC (G.) and EPSTEIN (B.). **Particular component in the blood plasma of mice with transplantable leukemia.** *Blood.* (1955), 10, No. 4, 325-33.

1-07367 — DE REYNIER (M.J.P.). **Quelques réflexions sur la dysréflexie vestibulaire croisée** *Ann. Oto. Laryng.* (1955), 71, No. -1, 44.

1-07368 — DESPONS (J.). **La sinusite maxillaire chronique chez l'enfant et dilatation bronchique.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 92.

1-07369 — DICK (J.C.). **Streptomycin combinations in renal tuberculosis.** *Antibiotic, Med.* (1955), 1, No. 3, 166.

1-07370 .. DJAN (M.A.) et HUSSON (R.). **Tomographie laryngée appliquée à la physiologie phonatoire différétielle et à l'étude du conditionnement de l'intensité de la voix.** *Ann. Oto. Larying.* (1955), 71, No. 1, 99-100.

1-07371 — DONALD (C.J.) and CLAYTON (O.W.). **Diaphragmatic hernia. A report of eighty-three cases.** *Amer. Surg.* (1955), 21, No. 1, 45-9.

1-07372 — DOUGHERTY (J.W.), REISCH (M), and LEWIS (G.M.). **ACTH and cortisone in dermatosis.** *Antibiotic, Med.* (1955), 1, No. 2, 106-7.

1-07373 — DOWLING (H.F.). **Antibiotics in pneumococcic pneumonia streptococcic infections and sub-acute bacterial endocarditis.** *Antibiotic, Med.* (1955), 1, No. 1, 3.

1-07374 — DOWNS (J.W.) and COPPER (W.G.). **Surgical comlications resulting from ACTH and cortisone medication.** *Amer. Surg.* (1955), 21, No. 2, 141-6.

1-07375 — DRESSLER (S.H.), ANTHONY (E.M.), RUSSELL (W.F.) Jr. CROW (J.B.), DENSIT-(J.), CHON (M.L.) and MIDDLEBROOK (G.). **Ambulatory chemotherapy of tuberculosis.** *Antibiotic, Med.* (1955), 1, No. 2, 107.

1-07376 — EDWARDS (C.R.), McGRAADY (C.W.) and FUNK (A.M.). **The effects of air conditioning on operating room air contamination.** *Amer. Surg.* (1955), 21, No. 3, 189-94.

1-07377 — EDWARDS (M.) and ROSIN (J.D.). **Essentials and nonessentials of colonic surgery.** *Amer. Surg.* (1955), 21, No. 3, 201-6.

1-07378 — EDEIKEN (J.) and BEERMAN-(H.). **Penicillin treatment of cardiovascular syphilis.** *Antibiotic, Med.* (1955), 1, No. 3, 164.

1-07379 — LEWIS (B.L.) and MONTGOMERY (H.). **The senile nail.** *J. Invest. Derm.* (1955), 24, No. 1, 11-8.

1-07380 — ELDON (K.). **Simulataneous abo and Rh grouping on cards.**-*Dans. Med. Bull.* (1955), 2, No. 33-40.

1-07381 — ELDER (J.D.) Jr. MAGANO (S.M.), EASTWOOD (D.W.) and HARNAGEL (D.). **Circulatory changes associated with thiopental anesthesia in man.** *Anesthesiology*, (1955), 16, No. 3, 394-400.

1-07382 — ELTORM (H.), JENSEN (K.K.) and TYGSTRUP (N.). **Cholecystography in patients suffering from acute apidemic hepatitis.** *Dan. Med. Bull.* (1955), 2, No. 2, 8-10.

1-07383 — ENELL (H.). **BCG-vaccination tuberculin allergy and tuberculosis in school children.** *Acta. Paediate., Stockh.* (1955), 44, No. 101, 1-128.

1-07384 — EPSTEIN (I.G.), NAIR (K.G.S.) and BOYD (A.L.). **Cycloserine, a new antibiotic, in the treatment of human pulmo-A preliminary report.** *Antibiotic, Med.* (1955), 1, No. 2, 80-93.

1-07385 — ESCAT (M.). **Exérèses pharyngo-laryngées et évidement ganglionnaires en un seul bloc dans les cancers pharyngo-laryngés.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 93.

1-07386 — ESKESEN (B.) and GLAHN (B.). **The epidemic of poliomyelitis in Greenland.** (1953). *Dand. Med. Bull.* (1955') 2, No. 2, 46-51.

1-07387 — ETSTEN (B.), REYNOLDS (R.N.) and LI (T.H.). **The effects of conterolled respiration on circulation during cyclopropane ansethesia.** *Ansthesiology*, (1955), 16, No. 3, 365-74.

1-07388 — EVERSON (T.C.) and ALLEN (M.J.). **Recurrent or persistent peptic ulceration following secondary operations for peptic ulcer.** *Amer. Surg.* (1955), 21, No. 2, 130-40.

1-07389 — FATTERPAKER (P.), MARFATIA (U.) and SREENIVASAN (A.). **Role of folic acid and vitamin b in trasmethylations. I. Formation of creatine in vitro and in vivo.** *Indian. J. Med. Res.* (1955), 43, No. 1, 43-500.

1-07390 — FELD (M.). **Exploration des centres et des voies centrales liés j la phonation et au langage au cours d'opérations de neurochirurgie cérébrale.** *Ann. Oto. Larhing.* (1955), 71, No. 1, 95.

1-07391 — FELDAKER and (M.), MONTGOMERY (H.) **Histopathology of porphyria cutanea tarda.** *J. Invest. Derm.* (1955), 24, No. 2, 131-7.

1-07392 — FINKE (W.). **Antibiotic-cortisone treatment of infections asthma.** *Antibiotic, Med.* (1955), 1, No. 1, 40-.

1-07393 — FINLAND (M.). **Antibiotics and the staphylococci.** *Antibiotic, Med.* (1955), 1, No. 1, 3.

1-07394 — FINLAND (M.). **Antimicrobial therapy of menigococcal infections.** *Antibiotic, Med.* (1955), 1, No. 3, 122-3.

1-07395 — FINLAND (M.). **Therapy of influenzal menigitis.** *Antibiotic, Med.* (1955), 1, No. 3, 123-4.

1-07396 — FISCHER-WILLIAMS (M.), BOSANQUET (F.D.), (P.M.). **Carcinomatosis of the meniges: a report of three cases.** *Brain*, (1955), 78, No. 1, 42-58.

1-07397 — FITZ (R.H.). **Classic contribution to surgery, perforating inflammation of the vermiform appendix with special reference to its early diagnosis and treatment.** *Amer. Surg.* (1955), 21, No. 1, 85-106.

1-07398 — FOLDES (F.F.), VANDERVORT (R.S.), and SHANOR (S.P.). **The fate of succinylcholine in man.** *Anesthesiology*, (1955), 16, No. 1, 11-21.

1-07399 — FOOTE (M.N.). **Unexpected cancer of the thyroid.** *Amer. Surg.* (1955), 21, No. 1, 32-8.

1-7400 — FOURNIER (M.J.E.). **Le seuil différentiel de la hauteur tonale. Ses relations avec le recrutement et la diplacousie. Son intérét en matiére d'appareillage.** *Ann. Oto. Laryng.* (1955), 71, inNo. 1, 58-62.

1-07401 — FLEMING (S.P.), KEARNS (P.R.) and LOCK (F.R.) **Oxytetracycline in vaginal hysterectomy.** *Antibiotic Med.* (1955) 1, No. 1, 41.

1-07402 — GAORGACOPOULOS (A.) et MACRIS (G.). **Sur un cas d'angiome artériel de la voue palatine. Son traitment.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 93.

1-07403 — GARDE (ED.). **Evolution des nos connaissances et des nos conceptions en matière de pathogénie et de la thérapeutique des troubles fonctionnels de la voix.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 99-100.

1-07404 — GARDE (M.). **Intervention de thérapeutiques médicales dans le traitment de divers types de bégayements.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 96.

1-07405 — GARLICŒ (W.L.). **Bronchiectasis:Observations upon seven hundred and five cases.** *Amer. Surg.* (1955), 21, No. 3, 246-54.

1-07406 — GEORGACOPOULOS (A.). **A propos de deux cas de macroglossies congénitales.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 92.

1-07407 — GERACI (J.E.), MARTIN (W.J.), NICHOLS (D.R.) and LARSON (L.W.). **Intravenous use of erythromycin.** *Antibiotic, Med.* (1955), 1, No. 3, 165.

1-07408 — GERNEZ-RIEUX (C.), MULLER (M.), MARCHAND-ALPHANT (A.), TACQUET (A.) et MULLER (P-H.). **Recherche de l'infection tuberculeuse sur les cadavres putréfies de mineurs de houille atteints de silicose.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 17, 1734-6.

1-07409 — GESCHWIND (N.) and SIMPSON (J.A.). **Procaïne amide in the treatment of myotonia.** *Brain*, (1955), 78, No. 1, 81-91.

1-07410— GIROUD (P.), JADIN (J.), ROGER (F.) et CONTINI (A.). **Les formes infrarickettsiennes des rickettsies démontrées par la culture en membrane vitelline.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 17, 1736-8.

1-07411 — GIROUD (P.), ROGER (F.) et CONTINI (A.). **Encéphalite du Chien. Isolement d'une souche de néo-rickettsies. Comportement sérologique.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 19, 1950-2.

1-07412 — GITELSOHN (I.I.) and TERSKOV (I.A.). **In Russian.** (The presence of groups of erythrocytes of different stability in blood). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 821-3.

1-07413 — GOLDMAN (L.), FLATT (R.) and BASKETT (J.). **Assay technics for loca lanti-inflammatory acitivity in th skin of as applied to 9a fluorohydrocortisone acetate and free alcohol.** *J. Invest. Derm.* (1955), 24, No. 2, 81-2.

1-07414 — GOPALAN (C.), SRIKANTIAH (S.G.) and VENKATACHALAM (P.S.). **Electrocardiographic changes in serve malnutrition.** *Indian. J. Med. Res.* (1955), 43, No. 1, 15-221

1-07415 — GRACE (E.J.). **Topical isoniazid-streptomycin iseroso. in the treatment of pulmonary tuberculosis.** *Antibiotic. Med.* (1955), 1, No. 1, 23-9.

1-07416 — GRANT (W.C.). **The influence of anoxia of rats and mice on blood of their normal offspring.** *Blood.* (1955), 10, No. 4, 334-40.

1-07417 — GRACE (E.J.). **Topical streptohydrazid treatment of a tuberculous sinus.** *Antibiotic, Med.*)1955), 1, No. 2, 104-5.

1-07418 — GRIGG (E.R.N.). **Historical and biblographical review of tuberculosis in the mentally ill.** *J. Jist. Med.* (1955), 10, No. 1, 58-108.

1-07419 — GRIMAUD (MM.R.) et WERNER (J.). **Un cas de sarcome du larynx avec métastases cutanées multiples.** *Ann. Oto. LaryYg.* (1955), 71, No. 1, 84.

1-07420 — GRUNER (A.). **Clincal experience with thtracycline.** *Dand. Med. Bull.* (1955), 2, No. 2, 28-21.

1-07421 — GUILLAIN (G.), BERTRAND (I.) et GODET-GUILLAIN (J.). **Atrophie lamellaire du cervelet consécutive une intoxication par l'oxyde de carbone.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 7, 707-10.

1-07422 — GUILLEN)G.). **Présentation de clichés tomographiques.** *Ann. Oto. Laryng.* (1955). 71, No. 1, 93.

1-07423 — GURVITCH (J.) and NELKEN (D.). **Elution of isoagglutinis adsorbed by platelets.** *Nature, London*, (1955), 175,-No. 4462, 822.

1-07424 — GUJRAL (M.L.), KOHLI (R.P.), BHARGAVA (K.P.) and SAXENA (P.N.). **Antipyretic activity of some indigenous drugs.** *Indiand. J. Med. Res.* (1955), 43, No. 1, 89-94.

1-07425 — GUPTA (S.P.). **Treatment of trachoma with chloramphenicol.** *Antibiotic, Med.* (1955), 1, No. 1, 42.

1-07426 — HAAGENSEN (N.R.). **Enzymatic adaptation in man.** *Dan. Med. Bull.* (1955), 2, No. 2, 63-4.

1-07427 — HALE (D.E.). **Controlled hypotension.** *Anesthesiology*, (1955), 16, No. 1, 1-10.

1-07428 — HAMPTON (L.J.), LITTLE (D.M.) Jr., RODABAUGH (G.S.) and CHAFFEE (W.R.). **Studies concerning concerning the prolongation of activity of succinylcholine.** *Anesthesiology*, (1955), 16, No. 1, 67-72.

1-07429 — HAMILTON (W.K.) and CULLEN (S.C.). **Supplementation of nitrous oxide anesthesia with opites and a new opiate antagonist.** *Anesthesiology*, (1955), 16, No. 1, 22-8.

1-07430 — HANSEN (P.F.) and SORENSEN (L.B.). **Interhuman transmission of ornithosis.** *Dan. Med. Bull.* (1955), 2, No. 2, 51-5.

1-07431 — HARDIN (C.A.). **Arterial heterografts. Observations on animal experiments and a report of one human case.** *Amer. Surg.* (1955), 21, No. 2, 147-55.

1-07432 — HARRIS (H.E.) and LOZA (E.P.). **The use of neomycin and hydrocortisone in the treatment of external otitis.** *Antibiotic, Med.* (1955), 1, No. 3, 164-5.

1-07433 — HATIOTIS (MM.J.) et COYES (A.). **Deux cas d'amylose laryngée primitive.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 52-7.

1-07434 — HERLITZ (G.) and REDIN (B.). **The prevalence of cerbral palsy.** *Acta. Paediat., Stockh.* (1955), 44, No. 2, 146-54.

1–07435 — HILL (J.M.) and SPEER (R.J.). **Combined hemophilia PTC deficiency.** *Blood.* (1955), 10, No. 4, 357-61.

1–07436 — HOPPE (J.O.). **Observations on the potency of neuromuscular blocking agents with particular reference to succinylchoine.** *Anesthesiology,* (1955), 16, No. 1, 91, 124.

1–07437 — HOYNE (A.L.). **Meningitis in childrel.** *Antibiotic, Med.* (1955), 1, No. 1, 424.

1–07438 — HUISMAN (T.H.J.), JONXIS (J.H.P.) and SCHAAF (P.C.V.). **Amino-acid composition of four different kinds of human heamoglobin.** *Nature, London,* (1955), 175, No. 4464, 902-3.

1–07439 — HUGGINS (R.A.) and MOYER (J.H.). **Some effects of N-allylnor-morphine on normal subjects and review of the literature.** *Anesthesiology,* (1955), 16, No. 1, 82-90.

1–07440 — HULL (H.C.) and HANKINS (J.R.). **Disruption of abdominal wounds.** *Amer. Surg.* (1955), 21, No. 3, 223-32.

1–07441 — HUNT (K.H.). **Resistance in respiratory valves and canisters.** *Anesthesiology,* (1955), 16, No. 2, 190-205.

1–07442 — IMSHENETSKY (A.A.). **In Russian.** (V.L. Elin's book 'The variability of microbes'.). *Microbiology, Moscow,* (1955), 24, No. 1, 114-7.

1–07443 — JACKSON (M.C.). **La granulome sur l'ulcère de contact et autres complications laryngées de l'anesthèsie endotrachéale.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 5-17.

1–07444 — JOILET (J.) et DU PERRON (M.C.). **Sur le degré de saturation de l'air expiré.** *C. R. Acad. Sci., Paris,* (195), 240, No. 18, 1806-7.

1–07445 — JORDAL (K.). **Blood grouping in a blood bank by the eldon method.** *Dan. Med. Bull.* (1955), 2, No. 2, 40-4.

1–07446 — JUDE (A.), LE MINOR (L.) st NICOLLE (P.). **Structure antigénique de deux variantes culturales spontanées de** Salmonella typhi. *C. R. Acad. Sci., Paris,* (1955), 240, No. 7, 822.

1–07447 — JUDE (A.), LABORIT (H.) et LEROUX (R.). **Action de l'hormone somatotrope sur la toxi-infection typhoidique esespérimentale de la souris blanche.** *Rev. Immunol.* (1955), 19, No. -1/2, 58-63.

1–07448 — JUDE (A.), NICOLLE (P.), MINOR (L.) et SERVANT (P.). **Virulence pour la souris blanche de deux variantes culturales spontanées de** Salmonella typhi. *C. R. Acad. Sci., Paris,* (1955), 240, No. 9, 1030-2.

1–07449 — JUSSEAUME (M.G.). **Un nouvel antibiotique local: l'argicilline.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 74-6.

1–07450 — KANOF (N.B.). **Melanin formation in vitiliginous skin undet the influence of external applications of 8-Methoxypsoralen.** *J. Invest. Derm.* (1955), 24, No. 1, 5-10.

1–07451 — KARLBERG (P.) ene LIND (J.). **Studies of the total amount of hemoglobin and the blood volume in childrent. I. Determination of total hemoglobin and blood volume il normal children** *Acta. Paediat., Stockh.* (1955), 44, No. 1, 17-36.

1–07452 — KAULLA (K.V.) and WEINER (M.). **Studies of coagulaton and «brinolysis by new technic of continuous recording.** *Blood.* (1955), 10, No. 4, 362-9.

1–07453 — KEITEL (H.G.), BERMAN (H.), JONES (H.) and MacLACHLAN (E.). **The chemical composition of normal human red blood cells including variability among cetrifuged cells.** *Blood.* (1955), 10, No. 4, 370-6.

1–07454 — KELLERSHOHN (C.) et PELLERIN (P.). **Application des scintillateurs à la détection photographique, in vivo, de collections radioctives dans l'organisme.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1816-8.

1–07455 — KETTEL (K.). **Decompression of the facial nerve in cases of hemifacial spasm.** *Dan. Med. Bull.* (1955), 2, No. 2, 56-60.

1–07456 — KENNARD (M.A.) and HAUGEN (F.P.). **The relation of subcutaneous focal sensitivity to referred pain of cardiac origin.** *Anestiesiology,* (1955), 16, No. 3, 297-311.

1–07457 — KIKUNI (M.) and TSUCHIYA (A.). **Cholramphenicol in trachoma.** *Antibiotix, Med.* (1955), 1, No. 2, 108.

1–07458 — KING (A.B.). **Successful removal of a nonchromaffin paraganglioma of a vagus nerve.** *Amer. Surg.* (1955), 21, No. 2, -170-6.

1–07459 — KING (R.). **Achalasia of the esophagus.** *Amer. Surg.* (1955), 21, No. 1, 39-44.

1–07460 — KNIGHT (V.). **Sensitivity tests.** *Antibiotic, Med.* (1955), 1, No. 2, 64-5.

1–07461 — KOONTZ (A.R.). **The anesthetic from the surgeon's point of view.** *Amer. Surg.* (1955), 21, No. 1, 77-9.

1–07462 — KOULUMIES (R.) and LAITINEN (H.). **Friedlander pneumonia.** *Antibiotic, Med.* (1955), 1, No. 3, 166.

1–07463 — LACHMAN (R.J.), LONG (J.H.) and KRUMPERMAN (L.R.W.). **The changes in blood gases associated with various methods of induction for endotracheal anesthesia.** *Anesthesiology,* (1955), 16, No. 1, 29-40.

1–07464 — LANGE (R.D.), WRIGHT (S.W.), IOMONAGA (M.), KURASKI (H.), MATSUOKE (S.) and MATSUNAGA (H.). **Refractory anemia occurring in survivors of the stomic bombing in Nagasakif Japan.** *Blood.* (1955), 10, No. 4, 312-24.

1–07465 — LARON (Z.). **Incidence of hypertrophic pyloris stenosis in the various Jewish communities in Israel.** *Acta. Pae- diat., Stockh.* (1955), 44, No. 1, 40.

1–07466 — LARSON (E.), WYNN (M.F.) and ADAMS (J.P.) Jr. **So,ium succinate in pentobarbital depression of the cerebra cortex and medulla oblongata.** *Anesthesiology,* (1955), 16, No. 2, 239-44.

1–07467 — LE LIONNAIS (MF.). **Les bases fondamentales de la théorie des communications et des jeux stratégiques sous l'angle de la psychophysiologie et de la linguistique.** *Ann. Oto. Layng.* (1955), 71, No. 1, 100.

1–07468 — LEWIS (J.H.), and FERGUSON (J.H.). **Hypoproacclerinemia.** *Blood,* (1955), 10, No. 4, 351-6.

1–07469 — LEVIN (J.C.). **Salmonella meningits in infancy.** *Antibiotic, Med.* (1955), 1, No. 1, 42.

1–07470 — LITTLE (D.M.) Jr. **Induced hypotension during anesthesia and surgery.** *Anesthesiology,* (1955), 16, No. 3, 320-32.

1–07471 — LISLE (A.C.). **The diagnosis and treatment of head injuries.** *Amer. Surg.* (19555), 21, No. 2, 117-23.

1–07472 — LINDEN (I.H.), LADEN (E.), ERICKSON (J.O.) and ARMEN (D.). **Electron microscopic study of normal skin collagen and elastic fibres.** *J. Invest. Derm.* (1955), 24, No. 2, 83-8.

1–07473 — LIVINGSTONE (H.M.). **Three decades of ethyleneoxygen anesthesia.** *Anesthesiology,* (1955), 16, No. 2, 224-9.

1–07474 — LONGACRE (A.B.), **Specific and prophlactic antibiotic therapy.** *Amer. Surg.* (1955), 21, No. 1, 80-4.

1–07475 — LONG (P.). **Chemotherpy and laboratory tests.** *Antibiolic, Med.* (1955), 1, No. 3, 121-2.

1–07476 — LOUGHLIN (E.H.) and MULLIN (W.G.). **The treatment of enterobiasis with crystalline oxytetracycline.** *Antibiolic, Med.* (1955), 1, No. 3, 145-50.

1–07477 — LUTZ (A.) et HOFFERER (M.-J.). **Sur les degrés de sensibilité et de résistance de bacilles des genres «proteus" et «providencia" à quelques antibiotiques.** *Rev. Immunol.* (1955), 19, No. 1/2, 69-85.

1–07478 — MALAKAR (M.C.), BANERJEE (S.N.) and GUHA (B.C.). **Studies on the effect of canning and storage on the nutritive value of some common vegetables. I. Changes in ascorbic acid incabbage.** *Indian, J, Med. Res.* (1955), 43, No. 1, 23-300.

1–07479 — MARCUS (P.S.) and SHEEHAN (J.C.). **Treatment of poetoperative vomiting.** *Anesthesiology,* (1955), 16, No. 3, 423-7.

1–07480 — MARTIN (W.J.) and NICHOLB (D.R.) and GERACI (J.E.). **General prinicples and use of antibiotics.** *Antibiotic, Med.* (1955), 1, No. 1, 41-2.

1–07481 — MASPETIOL (MM.) et SEMETTE. **Gain auditif aprés fenestration et modification de l'audition supraliminaire.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 27-32.

1–07482 — McCLURE (W.B.). **A severe nursery epidemic of diarrhoea associated with Esch coli type** 111 B4. *Antiobiotic, Med.* (1955), 1. No. 3, 163.

1–07483 — McCLINTOCK (J.C.). **The importance of mediastinal metastases in carcinoma of the thyriod.** *Amer. Surg.* (1955), 21, No. 2, -177.

1–07484 — McDONALD (W.L.J.), WELCH (H.J.) and KEET (J.E.). **Anisepsis of endorracheal tubes and face masks.** *Anesthesiology,* (1955), 16, No. 2, 206-13.

1–07485 — MEDVEDEV (N.N.). **In Russian.** (The blastomogenic activity of the carcinogenic factor of the milk glands of mice after keeping in the dry state for two years). *C. R. Acad. Sci, U.R.S.S.* (1955), 100, No. 5, 1009-11.

1-07486 .. MEINSMA (G.L.). **Etudes des surcharges affectives de la parole et des expressions linguistiques et extra-linguistiques diverses.** *Ann Oto. Larvyng.* (1955), 71, No. 1, 97.

1-07487 — MENDELL (H.E.), WORNAS (C.G.) and FOX-WORTHY (D.L.). **Antibiotic therapy in gonorrhea.** *Antibiotic, Med.* (1955), 1, No. 2, 106.

1-07488 — MESSER (M.). **A simple method for the estimation of glutamine in brain extracts.** *Biochem. Biophys, Acta.* (1955), 17, No. 1, 151-2.

1-07489 — MILLER (M.I.) and LORHAN (P.H.). **Clilical evalation of hypotensive anssthesia.** *Anesthesiology,* (1955), 16, No. 1, 73-81.

1-07490 — MOLTAKE (E.). **Adams-stokes syndrome following acute hemorrhage in an eight year old girl.** *Acta. Paediat., Stockh.* (1955), 44,-No. 1, 73-8.

1-07491 — MONTGOMERY (P..O'B.). **A characterization of basophilic degeneration of collagen by histochemical and micros-pectroscopic procedures.** *J. Invest. Derm.* (1955), 24, Bo. 2, 107. 10.

1-07492 — MORRIS (L.E.), KNOTT (J.R.) and PITTENGER (C.B.). **Electro-encephalographic and blood gas observations in human surgical patients during xenon anesthesia.** *Anesthesiology,* (1955), 16, No. 3, 312-19.

1-07493 — MOSKO (M.M.), NEJEDLY (R.F.) and ROSTEN-BERG (A.). Jr. **The significance of cutaneous reactions to pencillin, pencillium and trichophytil.** *Antibiotic, Med.* (1955), 1, No. 3, 125-30.

1-07494 — MOUSTARDIER (G.), BENTEGEAT (J.) et DU-RAND (B.). **Etude de la sensibilité aux antibiotiques de souches de «Pseudomonas aerugniosa" isolées des selles de prématurés et de nourrissons.** *Rev. Immunol.* (1955), 19, No. 1/2, 109-14.

1-07495 — MOYER (J.H.), McCONN (R.), and MORRIS (G. C.). **Effect of controlled hypotension with pendiomid (as used in surgery) on renal hemodynamis anc water and electrolyte excretion -A comparsion with hexamethonium and arfonad and the effect of norepiuephrine on these responses.** *Ansethesiology,* (1955), 16, No. 3, 355-74.

1-07496 — NIELSEN (K.). **The influence of social factors on the prognosis of cancer of the cervix uteri.** *Dan. Med. Bull.* (1955), 2, No. 2, 31-2.

1-07497 — NICLAIDES (N.), and ROTHAMN (S.). **The site of sterol and squalene synthesis in the human skin.** *J. Invest. Derm.* (1955), 24, No. 2, 125-9.

1-07498 — O'BREIN (J.P.). **Experimental miliaria. An instance with staphylococci and candida in the lsions.** *J. Invest. Derm.* (1955), 24, No. 2, 115-24

1-07499 — OCKLITS (H.W.) und SCHMIDT (E.F.). **Das Vorkommen von Colitypen der Gruppe O** 26 **bei Sauglingsdurchfallen.** (Some cases of Colitypes O26 by infantilie diarrhoea). *Acta. Paediat., Stockh.* (1955), 44, No. 2, 132-45.

1-07500 — OCHSNER (A.), BLALOCK (J.), and SUCRE (A.). **Carcinoma of the stomach.** *Amer. Surg.* (1955), 21, No. 1, 1M16.

1-07501 — O'DONNELL (J.A.) and McDERMOTT (Th. F.). **Ansthtic problems of sugical correction of aortic insufficiency.** *Ansthesiology,* (1955), 16, No. 3, 343-54.

1-07502 — OLESEN (I.). **A case of congnital polycystic kidney in a chid.** *Acta. Paediat., Stockh.* (1955), 44, No. 2, 163-71.

1-07503 — OMBREDANNE (M.), LECIONTRE et TRIBOULT. **Deux nouveaux cas de kystes dermiodes et fistules congénitales du dos du nez.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 78-80.

1-07504 — OMBREDANNE (M.) et SIARDET (V.). **Méningite otitique récidivante.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 87.

1-07505 — OMBREDANNE (M.) et SIARDET (J.). **Un polype choanal d'un volume exceptionnel.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 83-4.

1-07506 — ORSTEN (P.) and MATTSSON (A.). **Hospitalisation symptoms in childrn.** *Acta. Paediat., Stockh.* (1955), 44, No. 1, 79-92.

1-07507 — OSSEREZ (M.M.). **Kystes dermiodes et fistules congénitales médians du dos du nez** Ann.. *Oto. Laryng.* (1955), 71, No. 1, 33-43.

1-07508 — OVERTON (L.M.). **Injuries to the low back.** *Amer. Surg.* (1955) 21, No., 2, 124-9.

1-07509 — MYOUX (MM.R.), CARRAZ et REBATTU (J.P.). **Notions nouvelles sur l'étude de la résistance des germes aux antibiotiques. Premiers résultats. expérimentaux.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 22-6.

1-07510 — PAULET (G.). **Glutation sanguin et intoxication cyanhydrique aiguë.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 16, 1665.

1-07511 — MECK (G.C.) MACK (H.P.), HOLBROOK (W.A.) and FIGGE (F.H.J.). **Use of hematoporphyrin fluorescence in biliiary and cancer surgery.** *Amer. Surg.* (1955), 21, No. 3, 181-8.

1-07512 — PEDERSEN (K.Z.). **Disturbances in the acuity of smell from respiratoiy anomalies.** *Dan, Med. Bull.* (1955), 2, No. 2, 61-2.

1-07513 — PERTI (B.L.) and LAL (B.B.). **A relaible physiological index for evaluating summer clothing.** *Nature, London,* (1955), 175, No. 4465, 947.

1-07514 — PESSAGNO (D.J.). **Observations concerning some interesting lesions of the upper gastrointestinal tract.** *Amer. Surg.* (1955), 21, No. 3, 207-19.

1-07515 — PISCIOTTA (A.V.). **Cold hemagglutination in acute and chronic hemolytic syndromes.** *Blood,* (1955), 10, No. 4, 295-311.

1-07516 — POMMEZ (J.). **Classification des dysphonies.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 98-9.

1-07517 — PONS (J.). **The sexual diagnosis of isolated bones of the skeleton.** *Hum. Biol.* (1955), 27, No. 1, 12-21.

1-07518 — PORTMANN (M.) et RICAU (P.). **Tumeur cervicale congénitale kystique de dimensions exceptionnelles.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 94.

1-07519 — PORTENSEN (O.) and SONDERGAARD (G.). **Galactosemia.** *Acta. Paediat., Stockh.* (1955), 54, No. 2, 155-62.

1-07520 — PRIOLEAU (W.H.) and STALLWORTH (J.M.). **Surgical treatment of primary varcose veins.** *Amer. Surg.* (1955), 21, No. 1, 50-5.

1-07521 — RAIHA (N.). **Hemolysis of human blood caused by oxygen and its prvention with vitamin E.** *Acta. Paediat., Stockh.* (1955), 44, No. 2, 128-31.

1-07522 — RAMON (G.). **La lutte contre la rage chez les animaux domestiques et chez l'homme. Mesures sanitaires et vaccination.** *Rev. Immunol.* (1955), 19, No. 1/2, 1-26.

1-07523 — RAMON (G.). **A propos du vaccin et de la vaccination contre la polyiomélite.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 15, 1598-601.

1-07524 — RAMAMURTI (K.). **Studies on the nitrogen partition in the urine of rajasthanis.** *Indian. J. Med. Ros.* (1955), 43, No. 1, 61-70.

1-07525 — RAMAMURTI (K.). **A note on the haemoglobin levels of normal indian students in Rajasthan.** *Indian. J. Med. Res.* (1955), 43, No. 1, 57-60.

1-07526 — RANTZ (L.A.). **Treatment of Rheumatic fever.** *Antibiotic, Med.* (1955), 1, No. 2, 63-4.

1-07527 — RASCH (G.C.) and STRANGE (D.C.). **Perforation of duodenal stump four months after subtotal gastrectomy.** *Amer. Surg.* (1955), 21, No. 2, 164-5.

1-07528 — RAVEN (R.). **Le cancer du pharynx et son traitment chirurgical.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 81-2.

1-07529 — RAYMOND-HAMET. **Sur quelques propriétés spartéiniques de la rétamine.** *C. R. Acad. Sci., Paris,* (1955), 240, No. 21, 2092-4.

1-07530 — REIMANN (D.L.) and REEVES (H.G.). **Concomitance of acute appendicitis and acute cholecystitis.** *Amer. Surg.* (1955), 21, No. 3, 220-2.

1-07531 — REIN (C.R.). **Chemotherapy of syphilis and gonorrhea.** *Antibiotic, Med.* (1955), 1, No. 1, 44.

1-07532 — REID (D.B.W.) and GRAINGER (R.M.). **Variations in the caries susceptibility of childrens teeth.** *Hum. Biol.* (1955), 27, No. 1, 1-11.

1-07533 — RENOUX (G.) et AMARASINGHE (A.). **Action des sérums monospécifiques sur des mélanges de** Br. abortus et Br. melitensis. *C. R. Acad. Sci., Paris,* (1955), 240, No. 19, 1948-50.

1-07534 — RICHOU (R.), MEANT (M.) et RICHOU (H.). **Sur le pouvoir bactéricide de l'eau de mer à l'égard du staphylocoque** *Rev. Immunol.* (1955), 19, No. 1/2, 64-8.

1-07535 — RINDANI (T.H.). **Role of phagocytes in local defence** *Indian, J. Med. Res.* (1955), 43, No. 1, 95-99.

1-07536 — ROBIN (M.L.). **Première réalisation d'une myographie de corde vocale in situ et in vivo chez l'homme.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 97.

1-07537 — ROBISON (R.C.V.). **Treatment of anthelasma with vitamin B12.-***J. Invest. Derm.* (1955), 24, No. 2, 111-3.

1-07538 — ROBERT (M.J.L.). **Histopathologie et histogènése du nodule des chanteurs, comparativement aux autres tumeurs et pseudo-tumeurs du larynx.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 98.

1-07539 — ROBINSON (H.H.) Jr., ZELIGMAN (I.), ROBINSON (R.C.V.), COHEN (M.M.) and SHAPIRO (A.). **Erythromycin in dermatoses.** *Antibiotic, Med.* (1955), 1, No. 3, 167-4.

1-07540 — ROCKWELL (E.M.). **Study of several factors influencing contact irritation and sensitization.** *J. Invest. Derm.* (1955), 24, No. 1, 35-49.

1-07541 — ROLH (L.H.). **A report of long sustained therapy with chlortetracycline.** *Antibiotic,* (1955), 1, No. 1, 13-9.

1-07542 — RUDALI (G.), CHALVET (H.) et WINTERNITZ (F.). **Cancérisation de la vessie à l'acide de phénazines chez des rats.** *C. R. Acad., Sci., Paris,* (1955), 240, No. 17, 1838-40.

1-07543 — RYAN (R.F.). **Venereal disease contacts of a speci«c group of man in 5-day period.** *Hum. Biol.* (1955), 27, No. 1, 32-8.

1-07544 — SACHDEV (J.C.). **Vitamin b and fatty livers in panreatic duct ligated rats (with plate).** *Indian, I. Med. Res.* (1955), 43, No. 1, 39-42.

1-07545 — SADOVE (M.S.), WYANT (G.M.), JULIAN (O.C.) and DYE (W.S.). **Anesthesia for mitral commissurotomy.** *Anesthisiology,* (1955), 16, No. 1, 133-41.

1-07546 — SAGUEZ (M.R.H.) et ALBITRECCIA. **Dysphone fonctionnelle associée à des troubles du schéma corporel.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 98.

1-07547 — SANCHEZ (F.R.), SANCHEZ (A.R.), FLORES (N.) BECERRA (A.) and GRANDA (E.N.). **Treatment of brucellosis with tetracycline.** *Antibiolic, Med.* (1955). 1, No. 3, 158-62.

1-07548 — SANCHEZ (F.R.), SANCHEZ (A.R.) and GRANDA (E.N.). **Tetracycline in the treatment of typhoid fever.** *Antibiotic, Med.* (1955), 1, No. 1, 30-6.

1-07549 — SANCHEZ (F.R.), MANN (C.H.), SANCHEZ (A. R.), BECERRA (A.). and GRANDA (E.N.). **Tetracycline obtained by fermentaion in the treatment of thphoid fever. A preliminary report.** *Antibiotic, Med.* (1955), 1, No. 2, 94-9.

1-07550 — SANDOVAL (J.L.G.). **Treatment of samllpox with chloramphenicol.** *Antibiotic, Med.* (1955), 1, No. 3, 164.

1-07551 — SAUMONT (M.R.) et HUSSON (R.). **Etude expérimentale en chambre sourde, de l'énergie et de la directivité des voyelles aux différentes hauteurs tonales.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 99.

1-07552 — SAUVAGEOT (M.A.). **Analyse de la notion d'information sur le plan de la communiction linguistique.** *Ann. Oto. Laryng.*)1955), 71, No. 1, 100.

1-07553 — SAZYKIN (Yu. O.). **In Russian.** (Study of the action of albomycin and some other antibiotics on a multiplying culture of bacteria). *Microbiology, Moscow,* (1955), 24, No. 1, 75-8.

1-07554 — SCHAEFER (J.H.). **Treatment of tuberculosis with intermittent streptomycin and isoniazid.** *Antibiotic, Med.* (1955), 1, No. 3, 153-7.

1-07555 — SCHEAFFER (M.P.). **Introduction à l'étude expérimentale du probléme général de la classification des timbres.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 101.

1-07556 — SCHMIDT (H.), LOOSEN (H.) and HEINEN (W.). **Actinomycin C in management of Malignant growths and lymphogranulomatosis.** *Antibiotic, Med.* (1955), 1, No. 3, 163.

1-07557 — SCHOTZ (S.) and BIRKMIRE (E.L.). **A new approach to the use of electroschock devices in combating ventricular «brillation.** *Anesthesiology,* (1955), 16, No. 3, 441-4.

1-07558 — SCHOLZ (H.) und SCHWAFTZ (J.). **Ein Beitrag Klinik und Morphologie der Letters-Siweschen erkrankung.** (Contribution to morpholoy and clinic of Lettre-Siwashen disease). *Acta. Peadiat., Stockh.* (1955), 44, No. 2, 101-8.

1-07559 — SENECA (H.). **Treatment of intestinal anebiasis with carbomycin.** *Antibiotic, Med.* (1955), 1, No. 2, 107-8.

1-07560 — SESSOMS (G.W.), WATTS (D.T.), CHASE (H.F.) and ANDREWS (P.M.). **Effect of pentothal and penothal plus nitrous oxide-oxygen anesthesia upon blood sugar levels in man.** *Anesthesiology* , (1955), 16 , No . 2, 235-8.

1-07561 — SEGUNINARD (M.). **A propos d'un diagnostic délicat de paraltsie facial otogéne.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 94.

1-07562 — SHIPLEY (E.R.). **Balloon studies in megacolon.** *Amer. Surg.* (1955), 21, No. 3, 195-200

1-07563 — SIMONDEN (M.), HASEK (M.) and HRABA (T.). **Artficial production of immunological tolerance.** *Nature, London,* (1955), 175, No. 4461, 763-4.

1-07564 — SINGER (Th. P.), KEARNEY (E.B.) and ZASTROW (N.). **Isolation and properties of succinic dehydrogenase.** *Biochem, Biochem, Biophys, Acta.* (1955), 17, No. 1, 154-5.

1-07565 — SINGH (T.D.M.). TANEJA (G.M.), KHANNA (S.D.) and CHADDAH (M.R.). **Antibiotics in otitis media.** *Antibiotic, Med.* (1955), 1, No. 1, 41.

1-07566 — SLATER (J.K.) and SOMNER (A.R.). **Treatment of tuberculous meningitis.** *Antibiolic, Med.* (1955), 1, No. 3, 166.

1-07567 — SMITH (E.S.). **Salmonella meningitis in infants.** *Antibiotic, Med.* (1955), 1, No. 2, 107.

1-07568 — SOLOMONS (B.) Jr. **Tetracycline in skin diseases.** *Antibiotic, Med.* (1955), 1, No. 3, 165.

1-07569 — SOULAIRAC (A.) et HUSSON (R.). **Sensibilités internes et phonation.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 95.

1-07570 — SPENCER (C.H.) and COAKLEY (Ch. S.). **Clinical evaluation of syncurine (decamethonium bromide)- A tqo year study.** *Anesthesiology,* (1955), 16, No. 1, 125-32.

1-07571 — SRINIVASAN (P.R.) and PATWARDHAN (V.N.). **The effect of protein de«ciency on (a) some liver constituents and (b) enzymes in lever pancreas and blood plasma in albino rats** *Indian, J. Med. Res.* (1955), 43, No. 1, 1-14.

1-07572 — STANFORD (B.). **Theoretical first principles of endoscopic photograph.** *J. Photpgt. Sci. Section. B.* (1955), 3, No. 1, 1-4.

1-07573 — STONE (H.H.), MacKRELL (T.N.) and WECHSLER (R.L.). **The effect of on cerebral circulation and metabolism in man of acute recuction in blood pressure by means of intravenous hexamethonium bromide and head-up tilt.** *Anesthesiology,* (1955), 16, No. 2, 168-76.

1-07574 — STROM (J.). **The question of antagonism between penicillin and chloretracycline, illustrated by therapeutical experiments in scarlatina.** *Antibiotic, Med.* (1955), 1, No. 1, 6-12.

1-07575 — STOPPELMAN (M.R.H.). **Effect of antibiotics on nasopharyngeal flora.** *Antibiolic, Med.* (1955), 1, No. 2, 1064.

1-07576 — STOUGHTON (R.B.). **The selective affinity of anionic detergents for elastica:A new stain for elastica.** *J. Invest. Derm.* (1955), 24, No. 2, 89-95.

1-07577 — STUCK (R.M.) and JOHNSON (R.T.). **Neurofibromatosis producing persistent neck pain and paralysis of right arm following pre-eclampsia.** *Amer. Surg.* (1955), 21, No. 2, 166-9.

1-07578 — TAM (M.P.B.). **Un cas de cancer de la parotide hétérotopique.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 70-3.

1-07579 — TASCHDJIAN (C.L.). **Fountain pen ink as an aid in mycologic technic.** *J. Invest. Derm.* (1955), 24, No. 2, 77-80.

1-07580 — TEITELBAUM (H.A.) and GANTT (W.H.). **The effect of nembutal anesthesia on the carciac response to acetylcholine.** *Anesthesiology,* (1955), 16, -No. 2, 261-9.

1-07581 — TUCKER (W.B.). **Viomycin pulmonary tuberculosis.** *Antibiotic, Med.* (1955), 1, No. 1, 40-1.

1-07582 — VAAL (O.M.). **Genital intersexuality in three brothers, connected with consanguineous marriages in the three previous generations.** *Acta, Paediat., Stockh.* (1955), 44, No. 1, 35-39.

1-07583 — VANDEPITTE (J.M.), ZUELZER (W.W.), NEEL (J.V.), and COLAERT (J.). **Evidence concerning the inadequacy of mutation as an explanation of the freqeuency of the sickle cell gene in the Belgian Congo.** *Blood.* (1955), 10, No. 4, 341-50.

1-07584 — VARYANA ROA (M.). **The relationship of glyceride structure to fat digestibility.** *Indian, J. Med. Res.* (1955), 43, No. 1, 51-6.

1-07585 — VEENENKLAAS (G.M.H.). **Consequences of modern trends in pediatrics.** *Acta. Paediat., Stockh.* (1955). 44, No. 2, 171-4.

1-07586 — VAILLANT (G.). **Répercussions phonatoires des états affectifs, des états émotionnels et des intentions expressives volontaires.** *Ann. Oto. Laryng.* 71, No. 1, 96.

1-07587 — VIAR (W.N.). **Appendicitis with perforation and subphrenic abscess. Report of a case with anusual complications.** *Amer. Surg.* (1955), 21, No. 1, 73-6.

1-07588 — VIVANCO (A.P.) and FRANCO (J.). **Treatment of chancroid with streptomycin.** *Antibiotic, Med.* (1955), 1, No. 2, 108.

1-07589 — VANDAM (L.D.) and DRIPPS (R.D.). **The anesthetic properties of cyclobutane.** *Amesthesiology*, (1955), 16, No. 1, 48-56.

1-07590 — VOLKERT (M.) and CHRISTENSEN (P.M.). **Studies on ornithosis in Denmark.** *Dan. Med. Bull.* (1955), 2, No. 2, 55.

1-07591 — WAKSMAN (S.A.). **The position of antibiotics in relation to other antimicrobial and anti-infective agents.** *Antibiotic, Med.* (1955), 1, No. 2, 66-71.

1-07592 — WALKER (A.R.P.), FLETCHER (D.C.), STRYDOM (E.S.P.) and ANDERSON (M.). **Food preparations used in weaning urban Bantu infants.** *Brit. J. Nutr.* (1955), 9, No. 1, 38-41.

1-07593 — WALLACE (G.). **A lateral approach for lumbar sympathetic nerve block.** *Anesthesiology*, (1955), 16, No. 2, 254-60.

1-07594 — WALKER (A.M.). **Chemotherapy of tuberculosis.** *Antibiotic, Med.* (1955), 1, No. 1, 4-5.

1-07595 — WARWICK (R.). **The so-called nucleus of convergence** *Brain*, (1955), 78, No. 1, 92-114.

1-07596 — WARE (G.C.) and PAINTER (H.A.). **Bacterial utilization of cyanide.** *Nature, London*, (1955), 175, No. 4464, 900.

1-07597 — WEAVER (R.H.) and VIRTUE (R.W.). **Blood oxygenation as affectied by tidal volume and tension of nitrous oxide-oxygen inhaled at one mile altitude.** *Anesthesiology*, (1955), 16, No. 1, 57-66.

1-07598 — WEBER (R.G.), BOTH (G.M.) and KIERLAND (R.R.). **Further contributions to the vascular physiology of atopic dermatitis.** *J. Invest. Derm.* (1955), 24, No. 1, 19-30.

1-07599 — WELCH (H.). **Antibioties in respiratory infections.** *Antibiotic, Med.* (1955), 1, No. 2, 59-63.

1-07600 — WELCH (H.) and MARTI-IBRANEZ (F.). **Statment of purposes.** *Antibiotic, Med.* (1955), 1, No. 1, 1-2.

1-07601 — WELCH (H.), PUTMAN (L.E.) and RANDALL (W.A.). **Antibacterial activity and blood and urine concentrations of cycloserine, a new antigiotic following oral adminstration.** *Antibiotic, Med.* (1955), 1, No. 2, 72-9.

1-07602 — WERNER (G.). **Contribution à l'étude du développement du langage.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 9.

1-07603 — WETCHLER (B.V.) and BRACE (D.E.). **A technique to minimize the occurrence of headache after lumbar puncture by use of small bore spinal needles.** *Anesthesiology*, (1955), 16, No. 2, 270-82.

1-07604 — WEINBREG (W.). **Topical neomycin in cervical and vaginal infections.** *Antibiotic, Med.* (1955), 1, No. 3, 167.

1-07605 — WILD (CH.), SICHEL (D.) et KLOTZ (G.). **Intérét de la tomographie dans le diagnostic des mucocèles.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 63-9.

1-07606 — WILLCOX (R.R.). **Erythromycin in nongonococcal urethritis.** *Antibiotic, Med.* (1955), 1, No. 3, 139-41.

1-07607 — WILLCOX (R.R.). **Tetracycline hydrochloride in the treatment of nongonococcal urethritis.** *Antibiotic, Med.* (1955), 1, No. 3, 142-4.

1-07608 — WINKELMANN (R.K.). **A silver impregnation method for peripheral nerve endigns.** *J. Invest. Derm.* (1955), 24, No. 1, 57-64.

1-07609 — WISE (W.D.). **A few thoughts on the clinical teaching of surgery.** *Amer. Surg.* (1955), 21, No. 3, 278-81.

1-07610 — WITTEN (V.H.), SULZBERGER (M.B.(, ZIMMERMAN (E.H.) and SHAPIRO (A.J.). **A therapeutic assay of topically applied 9a-Fluorhydrocortisone acetate ii selected dermatoses.** *J. Invest. Derm.* (1955), 24, No. 1, 1-4.

1-07611 — WOOD (J.C.), KIPNIS (G.P.), SPIES (H.W.), DOWLING (H.F.), LEPPER (M.H.) and JACKSON (G.G.). **Tetracycline therapy.** *Antibiotic, Med.* (1955), 1, No. 1, 41.

1-07612 — WOOLSEY (R.D.). **Decompression of the gasserian ganglion and posterior root in treating trigeminal neuralgia.** *Amer. Surg.* (1955), 21, No. 1, 56-62.

1-07613 — WRIGHT (J.). **Non-motile** Escherichia coli 055, **B5 strains.** *J. Gen. Microbiol*, (1955), 12, No. 2, 157-61.

1-07614 — XUONG (N. D.). **Sur l'activité tuberculostatique de quelques p-sulfamidothiocarbanilides.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 12, 1378-80.

1-07615 — YANNOULIS (G.). **La narco-analyse dans l'acoumétrie et la phoniatrie.** *Ann. Oto. Laryng.* (1955), 71, No. 1, 95.

1-07616 — YAMAMURA (Y.), YASAKA (S.), NAKAMURA (S.), YAMAGUCHI (M.), OGAWA (Y.), ENDO (D.) and TAKEUCHI (H.). **Experimental formation of tuberculous cavity by chemical constituents of tubercle bacilli.** *Proc. Jap. Acad.* (1955), 31, No. 1, 36-40.

1-07617 — YAMAGISHI (M.). **An improved method for arch-like gastric resection.** *Amer. Surg*, (1955), 21, No. 2, 156-63.

1-07618 — YEAGER (G.H.), COWLEY (R.A.) and CURTIS (H.P.). **Lumbar sympathectomy in organic peripheral vascular disease.** *Amer. Surg.* (1955), 21, No. 3, 233-7.

1-07619 — ZASLOW (J.), COHN (E.M.) and BALL (W.). **The effect of dehydrocholic acid on the excretion and concentration of oxytetracycline and tetracycline in bile.** *Antibiotic, Med.* (1955), 1, No. 3, 151-2.

1-07620 — ZETTERSTROM (R.) and ABERG)B.). **Infants of diabetc mothers. II. Studies on the electrolyte metabilism and the effects of starvation during the first days of life.** *Acta. Paediat., Stockh.* (1955), 44, No. 1, 1-16.

1-07621 — ZETTERSTROM (R.) and WINBERG (J.). **Primary vitamin C refractory rickets. II. Metabolism studies during treatment with massive doses of vitamin D.** *Acta. Paediat., Sstockh.* (1955), 44, No. 1, 45-61.

I. Engineering

1-07622 — **Building top lighting for decorative diplay.** *Illum. Engng.* (1955), 50, -No. 5, 263.

1-07623 — **Dispositifs spéciaux utilisant des moteurs électriques.** *Prat. Indstr. Méc.* (1955), 42, No.-5, 135-8.

1-07624 — **First Canadian gas turbine.** *Elect. J.* (195), 1554, No. 14, 1134-5.

1-07625 — **L'utilisation du caoutchouc dans les opérations de la presse.** *Prat, Industr. Méc.* (1955), 42, No. 4, 107-8.

1-07626 — **Le façonnage par gravure chimique.** *Prat. Industr. Méc.* (1955), 42, No. 4, 103-4.

1-07627 — **Light for seeing principles in an ecclesiastical design.** *Illum. Engng.* (1955), 50, No. 3, 101-2.

1-07628 — **Lighting a small snack shop.** *Illum. Engng.* (1955), 50, No. 6, 317.

1-07629 — **Leadership in the coal industry of Britain.** *Nature, London,* (1955), 175, No. 4464, 867-70.

1-07630 — **Montage d'assemblage à fixations pneumatiques pour machines-outils.** *Prat. Industr. Mèc.* (1955), 42, No. 4.-95-5.

1-07631 — **New stal gas turbine power plant.** *Elect. J.* (1955), 154. No. 14, 1140-1.

1-07632 — **New wrinkles in lithting application.** *Illum. Engng.* (1955), 50, No. 1, 1-4.

1-07633 — **Some specifications for industrial lighting.** *Illum. Engng.* (1955), 50, No. 5, 256-8.

1-07634 — **Subway lighting in New york city and Osaka, Japan.** *Illum. Engng.* (1955), 50. No. 1, 46-7.

1-07635 — **Specialty lighting - anytime, anywhere.** *Illum. Engng.* (1955), 50, No. 6, 300-1.

1-07636 — **Une installation mobile de criblage et stockage des produits de ballastiére.** *Equipem. Mécan.* (1955), 34, No. 306, 7-9.

1-07637 — Addor (G.). **Groupe d'H.L.M. Genève.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 58-9.

1-07638 — AFRIQUE (A.). **Habitat collectif musulman, Casablanca.** *-Archit, Aujourd'hui,* (1955), 25, No. 5, 54-5.

1-07639 — ALBERT (P.). **Mesure des porosités de fissure de macropore.** *Rev. Inst. Franc. Pétrol,* (1955), 10, No. 43, 155-63.

1-07640 — ALEXANDER (M.) and WARDLAW (J.). **Temporary and permanent changes in the strengh of hardened pozzolana lime and portland pozzolanic cement mortaras.** *Aust. J. Appl. Sci.* (1955), 6, No. 1, 46-60.

1-07641 — ALEXANDER (K.M.). **Effect of water cement ratio on the contribution made by powdered admixtures to the strength of blended portland cement mortars.** *Aust. J. Appl. Sci.* (1955), 6, No. 1, 61-77.

1-07642 — ARMITAGE (J.W.). **A portable restriking voltage display unit.** *Electron, Engng.* (1955), 27, No. 325, 115-7.

1-07643 — ATBAT (H.L.M.). **Emmaus, Aulnay-sous-bois.** *Archit, Aujourd'hui,* (1955), 25, No. 57, 14-6.

1-07644 — BAHUAUD (A.). **sutiɹs à pro«l constant.** *Prat. Industr. Méc.* (1955), 42, No. 4, 98-9.

1-07645 — BALLEY (S.) et LUBETKIN. **Immeubles à Halford Squre, Finsbury, Londres.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 90-1.

1-07646 — BAKER (F.H.). **Investigation into the dust problem associated with skip winding in an upcast shaft.** *Trans. Instn. Min. Engng, London,* (1955), 113, No. 4, 367-82.

1-07647 — BARR (A.C.) and KARASH (W.J.). **Design of high output fluorescent lamps.** *Illum. Engng.* (1955), 50, No. 1, 5-16.

1-07648 — BARS (Y.). **Emploi de blocs tétrapodes.** *Travaux.* (1955), 39, No. 244, 96-101.

1-07649 — BARS (Y.). **Les travaux d'extension des ports.** *Travaux.* (1955), 39, No. 244, 85-95.

1-07650 — BAUDOT (L.). **L'usine thermo-electrique de Roches-Noires Sud a Casablanca.** *Travaux.* (1955), 39, No. 244, 257-78.

1-07651 — BAUZIL (V.) et DESGIGOT (A.). **La plaine du Talda.** *Travaux.* (1955), 39, No. 244, 147-202.

1-07652 — BAUZIL (V.). **Programmes généraux d'irrigation et de drainage.** *Travaux.* (1955), 39, No. 244, 111-9.

1-07653 — BECK (P.). **Unité Billardon à Dijon, France.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 83-5.

1-07654 — BELGIOJOSO (L.B.), PERESSUTTI (E.), et ROGERS (E.N.). **Nouveau magasin Olivetti à New-York.** *Archit, Aujourd'hui,* (1955), 26, No. 58, 58-9.

1-07655 — BENNETT (I.C.) and VIVAIN (H.E.). **Studies in cement-aggregate reaction XXII. The effect of «ne ground poaline material on mortar expansion.** *Aust. J. Appl. Sci.* (1955), 6, No. 1, 88-93.

1-07656 — BERNARD (P.). **Le périmétre d'irrigation des Abda-Doukkala.** *Travaux.* (1955), 39, No. 244, 147-58.

1-07657 — BERNARD (H.). **Maison de la radio à Paris.** *Archit. Aujourd'hui,* -(1955), 26, No. 58, 15.

1-07658 — BERNASCONI, FIOCCHI et NIZZOLI. **Le siège de la societe Olivetti à Milan, Italie.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 52-7.

1-07659 — BICKEL (E.). **Contribution to the theory of frictional of turning tools.** *Microtecnic,* (1955), 9, No. 2, 53-8.

1-07660 — BLACKWELL (H.R.). **Use of performance data to specify quantity and quality of interior illumination.** *Illum. Engng.* (1955), 50, No. 6, 286-99.

1-07661 — BOCHET (H.). **Etude sur modèle réduit.** *Travaux.* (1955), 39, No. 244, 102-10.

1-07662 — BOILEAU et LABOURDETTE. **Centrale de Natechevire, France.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 16-9.

1-07663 — BOSSARD (J.A.). **La commande et la protection des moteurs de petite puissance.** *Prat. Industr, Méc.* (1955), 42, No. 5, 138-140.

1-07664 — BRADLEY (R.D.). **The Layman's use of glare factors.** *Illum. Engng.* (1955), 50, No. 5, 213-6.

1-07665 — BRAEM, MAES et MAERMANS. **Quartier Kiel Anvers.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 66-70.

1-07666 — BREUR (M.), NERVI (P.L.) et ZEHRFUSS (B.H.). **Le siege de L'Unesco à Paris.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 26-31.

1-07667 — BROCARD (J.). **Application des isotopes radioactifs à la mesure de la densité et de la teneur en eau des matériaux et des sols.** *Ann. Inst. Batim.* (1955), 8, No. 89, 427-50.

1-07668 — BROEK (V.D.) et BAKEMA. **Unité résidentielle Overchie.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 78-9.

1-07669 — BRUCE (C.E.R.). **The leader strokes of the lightining and spark discharges.** *J. Instn. Elect. Engrs.* (1955), 1, No. 1, 38.

1-07670 — BURNGAM (R.D.). **Graphical representation of utilisation date.** *Illum. Engng.* (1955), 50, No. 1, 43-5.

1-07671 — CADIERGUES (M.R.). **Energie électrique et chauffage d'ambiance.** -*Bull. Soc. Franc. Elect.* (1955), 5, No. 50, 67-94.

1-07672 — CANDILIS (G.). **L'esprit du plan de masse de l'habitat.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 1-7.

1-07673 — CAMPREDON (J.). **Recherches et travaux du centre technique du bois el matiere d'utilisation du bois dans la charpente et la menuiserie.** *Ann. Inst. Batim.* (1955), 8, No. 89, 413-26.

1-07674 — CHEVRIER (H.). **Travaux à Karnak.** *Equipem. Mécan* (1955), 34, No. 306, 21-5.

1-07675 — CHEMINEAU (J.) et FORCIOLI (J.). **Immeuble mixte, Rabat.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 52-3.

1-07676 — CHAUMONT (A.). **La reconstruction du pont de Pont-de-l'Arche sur l'Eure et la Basse Seine. Mise en œuvre du procédé «colcréte".** *Travaux.* (1955), 39, No. 246, 376-8.

1-07677 — CLAUSSE (R.). **Exécution de deux piéces différentes tour multibroche.** *Prat. Industr. Méc.* (1955), 42, No. 4, 96-8.

1-07678 — COLDBERG (G.). **Groupe d'habitations, Suresnes.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 28.

1-07679 — COLIN (H.). **Rempiétement des quais Nord de la petite de la grande darse du port de Bone.** *Travaux.* (1955), 39,-No. 246, 352-4.

1-07680 — COCKETT (A.H.). **Vapour circulating pumps.** *Nature, London,* (1955), No. 4461, 768-9.

1-07681 — COLIN (H.). **Rempiétement des quais nord de la petite et de la grande darse du port de Bone.** *Travaux.* (1955), 39, No. 245, 317-23.

1-07682 — COSTES (G.). **Déminéralisation de l'eau d'alimentation des chaudières.** *Chal. et. Industr.* (1955), 36, No. 357, 103-28.

1-07683 — D'ATHOYGUI (R.) et SANSHEZ (F.). **Immeuble d'appartements, Lisbonne.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 82-3.

1-07684 — DAVIS (A.), STEPHENSON (R.E.) and HARRIS (L.D.). **A new low-cost dimmer for hot cathode fluorescent lamps.** *Illum. Engng.* (1955), 50, No. 3, 143-6.

1-07685 — DE BOER (J.B.). **Light-beacons to aid landing aricraft.** *Philps. Rech. Rev.* (1955), 16, No. 10, 273-86.

1-07686 — DE ROUVILLE (M.). **Etude générale des problémes posés à propos des installations par la climatisation des ambiances souterranes.** *Ann. Ponts. Chaux.* (1955), No. 2, 221-39.

1-07687 — DELARUE (J.), MARIOTTI (M.) et MEYER (J.P.). **Quelques problèmes de fondations au Maroc.** *Travaux.* (1955), 39, No. 244, 225-32.

1-07688 — DESCHAMPS (J.). **L'assainissement de la plaine du Rharb.** -*Travaux.* (1955),.39, No. 244, 139-46.

1-07689 — D'INGUIMBERT (C.). **La ligne de Guenfouda a Hasiblal-Djérada.** *Travaux.* (1955), 39, No. 244, 65-70.

1-07690 — DANTU (P.), ARD (E.) et LACOMBE (G.). **La reconstruction du pont Canada à Tréguier. Arcs de 153m de portée.** *Travaux.* (1955), 39, No. 245, 289-316.

1-07691 — DORSTEN (A.C.V.). **Lightning and aircraft.** *Philips. Tech. Rev.* (1955), 16, No. 10, 296-7.

1-07692 — DOBUS (R.). **L'usinage des matériaus thermo-plastiques.** *Prat. Industr. Méc.* (1955), 42, No. 5, 113-21.

1-07693 — DUBOIS (L.J.) et SCHMID (A.). **La reconstruction du pont du pont-de-l'Arche sur l'Eure et la Basse Seine. Note sur l'éxécution de la charpente métallique.** *Travaux.* (1955), 39, No. 246, 378-81.

1-07694 — DUCAS (D.). **Contribution à la défense des côtes-Problémes généraux. Perrés-épis - brise mer.** *Ann. Ponts. Chauss.* (1955), No. 1, 17-45.

1-07695 — **Electricity from the wind.** *Elect. J.* (1955), 154, No. 14, 1149-50.

1-07696 — ESCHELBY (R.A.). **Outdoor decorative lighting techniques.** *Illum. Engng.* (1955), 50, No. 4, 155-67.

1-07697 — EUGENE (F.). **New method for evaluating coolant efficiency.** *Microtecnic,* (1955), 9, No. 2, 69-80.

1-07698 — **Extraction du charbon par fendues.** *Equipem, Mécan.* (1955), 34, No. 306, 27-9.

1-07699 — FAHSBERNDER (M.). **Pewter and modern lighting.** *Illum. Engng.* (1955), 50, No. 4, 168-9.

1-07700 — FALCONER (J.M.). **Application de la radio à la manutention mécanique.** *Equipem. Mécan.* (1955), 34, No. 306, 30-1.

1-07701 — FOURGO (M.C.). **La nouvelle forme de radoub.** *Travaux.* (1955), 39, No. 244, 81-4.

1-07702 — FINN (J.F.). **One way to light a refrigerated showcase.** *Illum. Engng.* (1955), 50, No. 5, 217-8.

1-07703 — FRANCIS (A.J.). **Direct design of non-linear redundant traingulated frameworks.** *Aust. J. Appl., Sci.* (1955), 6, No. 1, 13-31.

1-07704 — FRY (G.A.) and ALPERN (M.). **Effect of a peripheral glare source up on the apparent brightness of an object.** *Illum. Engng.* (1955), 50, No. 1, 31-8.

1-07705 — GASCUEL (L.). **Réservoirs en béton armé à paroi hydraulique pour le stockage des hydrocarbures légers ou lourds.** *Equipem, Mécan.* (1955), 34, No. 306, 14-6.

1-07706 — GASCUEL (L.). **Pose d'un filetage en acier dans les matiéres tendres.** *Prat. Industr. Méc.* (1955), 42, No. 4, 99-102.

1-07707 — GASKIN (A.J.), JONES (R.H.) and VIVIAN (H.E.). **Studies in cement-aggregate reaction XXI. The reactivity of various forms of silica in relation to the expansion of mortar bars.**

1-07708 — GEVANTMAN (L.H.) and SAM (D.). **The penetration of concrete by radionuclides in solution.** *Canad. J. Technol,* (1955), 33, No. 2, 122-7.

1-07709 — GIGUET (R.). **Les problèmes techniques de l'équipement électrique à électricité de France.** *Travaux,* (1955), 39, No. 246, 345-51.

1-07710 — GINSBERG (J.) et MASSE (G.). **Unité de residence, Monaco.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 44-6.

1-07711 — GLADMAN (C.A.). **Production engineering research in Europe, Great-Britain and the United States of America.**-*Microtecnic,* (1955), 9, No. 2, 80-5.

1-07712 — GOELZER (A.) et MICHAUD (M.). **La reconstruction de pont du Pont-de-l'Arche sur l'Eure et la Basse Seine. Note sur l'éxécution du controle des soudures.** *Travaux,* (1955), 39, No. 246, 381-2.

1-07713 — GODEFROY (G.). **Doit-on généralisear les gratte-ciel de plus de dix étages ?.** *Travaux,* (1955), 39, No. 244, 253-6.

1-07714 — GOLDING (E.W.). **Wind energy.** *J. Instn. Engrs.* (1955), 1, No. 1, 70-2.

1-07715 — GONGY (P.M.). **Fondation de marteau-pilon, en béton précontraint à vibrations controlées.** *Travaux,* (1955), 39, No. 243, 19-26.

1-07716 — GOODMAN (R.H.). **Raceway lighting at Vernon downs.** *Illum. Engng.* (1955), 50, No. 3, 123-4.

1-07717 — GRAUX (D.). **Quelques appontements modernes.** *Travaux.* (1955), 39, No. 243, 27.

1-07718 — GRAND (P.). **Influence de la température sur l'étalonnage des jauges.** *Rev. Gen. Mécan.* (1955), 39, No. 74, 39-50.

1-07719 — GRICE (C.S.W.). **The use of still and ciné-photographic techniques in mining (safety) research.** *J. Photogr. Sci. Section B.* (1955), 3, No. 1, 5-9.

1-07720 — GRIFFITH (J.W.), ARNER (W.J.) and CONOVER (E.W.). **A modified lumen method of daylighting design.** *Illum. Engng.* (1955), 50, No. 3, 103-12.

1-07721 — GUEDY (J.F.). **Emetteurs de radio-télévision Europe No. 1, Sarre.** *Archit. Aujourd'hui.* (1955), 26, No. 58, 8-14.

1-07722 — GUTH (S.K.). **Quality of ligting.** *Illum. Engng.* (1955), 50, No. 6, 279-85.

1-07723 — GUTH (P.J.) et SERGENT (J.). **Cite résidentielle à Oran, Algérie.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 88-9.

1-07724 — GUTTON (A.). **Chantier de Bezons Santrouville.**-*Archit, Aujourd'hui,* (1955), 25, No. 57, 10-1.

1-07725 — HAWKINS (W.E.), TILL (W.S.) and ROWTEN (D. D.). **The diamond jubilee of 1954 and its effect on streetlighting of tomorrow.** *Illum. Engng.* (1955), 50, No. 3, 125-36.

1-07726 — HEAUME (A.G.) et PERSITZ (A.). **Chantier de Villejuif.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 8-9.

1-07727 — HEDRICH (W.A.). **Lighting education in continental western Europe.** *Illum. Engng.* (1955), 50, No. 6, 309-14.

1-07728 — HEDRICH (W.A.). **Luminous flux from a luminaire.** *Illum. Engng.* (1955), 50, No. 4, 170-2.

1-07729 — HEINRICH (G.) and DESOYER (K.). **Hydromechanische Grundlagen fur die Behandlung von stationaren und instationaren Grundwasserstromungen.** (Hydromechanic bases for the treatment of steady and non-steady ground water flows). *Ingen. Arch.* (1955), 23, No. 2, 73-84.

1-07730 — HELSON (H.). **Color and seeing.** *Illum. Engng,* (1955), 50, No. 6, 271-8.

1-07731 — HEMPEL (S.). **Le flambement des éléments en béton ou en autres matériaux non-subordonnés à la loi de Hooke.** *Bull. Acad. Polonaise, Sci.* (1955), 3, No. 1, 39-41.

1-07732 — HEMPEL (S.). **Certains lois du fléchissement des éléments constitués en matériaux à module de Young variable.** *Bull. Acad. Polonaise, Sci.* (1955), 3, No. 1, 35-8.

1-07733 — HENRY (A.), NARKISIAN (J.G.) et MATHEY (R.). **Immeubles, Toulin.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 40-1.

1-07734 — HENRIOT (F.). **L'alimentation en eau de Casablanca.** *Travaux.* (1955), 39, No.-244, 203-13.

1-07735 — HERVIO (P.). **Habitat marocain urbain.** *Travaux.* (1955), 39, No. 244, 233-42.

1-07736 — HERZOG (A.). **Problèmés techniques soulevés par la signalisation lumineuse dans les grandes villes.** *Ann. Ponts. Chaux.* (1955), No. 2, 193-220.

1-07737 — HOFMANN (H.). **Le nouveau hall de la foire de Bâle, Suisse.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 60-5.

1-07738 — HUG (A.M.). **Considérations sur les lignes de contact modernes pour trolleybus.** *Rev. Gen. Elect.* (1955), 64, No. 1, 5-12.

1-07739 — HUR-(E.) et GOUYON (H.). **H.L.M., Saint-Etienne** *Archit. Aujourd'hui,* (1955), 25, No. 57, 22-3.

1-07740 — **I.E.S. Lighting data sheet. Series XX. Lighting a conference room.** *Illum. Engng.* (1955), 50, No. 6, 267-8.

1-07741 — **I.E.S. Lighting data sheet. Series XX. Lighting an executive of«ce.** *Illum. Engng.* (1955), 50, No. 3, 113-4.

1-07742 — **I.E.S. Lighting data sheet. Series XX. Lighting a church.** *Illum. Engng.* (1955), 50, No. 4, 175-6.

1-07743 — **I.E.S. Lighting deta sheet. Series XX. lighting a dangerous intersection.** -*Illum. Engng.* (1955), 50, No. 1, 29-30.

1-07744 — **I.E.S. Home lighting data sheet. Luminous ceiling in a remodeled bathroom.** *Illum. Engng.* (1955), 50, No. 5, 225-6.

1-07745 — **I.E.S. Home lighting data sheet. Soffit lighting in a kitchen.** *Illum. Engng.* (1955), 50, No. 6, 315-6.

1-07746 — **I.E.S. General guide to photometry - Section** 1, 4 and 5. *Illum. Engng.* (1955), 50, No. 3, 147-52.

1-07747 — **I.E.S. Lighting data sheet - series XX. Lighting a railroad station.** -*Illum. Engng.* (1955), 50, No. 6, 307-8.

1-07748 — **I.E.S. Guide to photometry sections** 6 **and** 7. *Illum. Engng.* (1955), 50, No. 4, 201-10.

1-07749 — **I.E.S. Lighting data sheet. Series XX., lighting a classroom.** *Illum. Engng.* (1955), 50, No. 4, 197-8.

1-07750 — **I.E.S. Lighting data sheet. Series XX., Lighting a meter standardization laboratory** (10-27). *Illum. Engng.* (1955), 50 No. 3, 141-2.

1-07751 — **I.E.S. Lighting data sheet. Series XX., Floodlighting an industrial plant.** *Illum. Engng.* (1955), 50, No. 4, 211.

1-07752 — **I.E.S. lighting date sheet. Series XX., Lighting a barbar shop.**-*Illum. Engng.* (1955), 50, No. 1, 39-40.

1-07753 — IRVIN (CH.F.). **A new design for small motors.** *Westingho, Engr.* (1955), 15, No. 2, 57-8.

1-07754 — **Italian power developments.** *Elect. J.* (1955), 154, No. 14, 1141.

1-07755 — JARVI (J.). **Ecole primaire près d'Helsinki, Finlande.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 76.

1-07756 — JARVIS (C.M.). **The history of electrical engineering -I.** *J. Instn. Elect. Engrs.* (1955), 1, No. 1, 13-37.

1-07757 — JEAVONS (R.T.), HORNER (R.H.) and BURNHAM R.D.). **Cavity efficiency for translucent ceilings.** -*Illum. Engng.* (1955), 50, No. 3, 137-40.

1-07758 — JEFFREY (R.). **Practical inspection of mine gear.** *Trans. Instn. Min. Engrs, London,* (1955), 114, No. 5, 387-409.

1-07760 — JINDRA (F.). **Der ebene Verzerrungszustand des dickwandigen Rohres bei einem nichtlinearen Elastizitatsgesatz.** (The state of plane distortion of the thick-walled tube in perence of a non-linear law of elasticity). *Ingen. Arch.* (1955), 23, No. 2, 122-9.

1-07761 — JOSSE (H.). **La sécurité dans les usines génératrices thérmiques.** *Rev. Gen. Elect.* (1955), 64, No. 2, 75-80.

1-07762 — KECK (M.E.) and OGLESBEE (W.A.). **Operation of mercury vapor lamps on series street lighting circuits.** *Illum. Engng.* (1955), 50, No. 3, 115-22.

1-07763 — KENNERLEY (R.A.). **Heats of hydration of New Zealand portland and pozzolan cements.** *N.Z.J. Sci., Tech.* (*Sect. B.*) -(1955), 36, No. 3, 335-43.

1-07764 — KEULEYAN (L.). **Les moteurs à huile lourde à allumage par compression.** *Rev. Gen. Mécan.* (1955), 39, No. 71, 27-35.

1-07765 — KIDD (A.W.) and HUGHES (H.M.). **Modern trends in winding technique.** *Trans. Instn. Min. Engrs., London,* (1955), 114, No. 5, 423-65.

1-07766 — LARRAS (J.). **Bref apercu du fonctionnement des ports maritimes de la république d'Indonésie.** *Ann. Ponts. Chauss.* (1955), No. 1, 1-10.

1-07767 — LELOUP (L.). **Comment réduire la puissance perdue en frottements dans les paliers lisses ?** *Rev. Gen. Mécan.* (1955), 39, No. 75, 87-99.

1-07768 — LE PORT (R.) et DE LA SERVE (H.). **La construction du pont levant de Brest pont de recouvrance.** *Travaux.* (1955), 39, No. 243, 5-15.

1-07769 — LHERMITTE (P.). **Conditions de travail de quelques engins de terrassement de grand rendement.** *Travaux.* (1955), 39, No. 245-34.

1-07770 — LODS (M.) et CAMMAS (M.). **Immeubles Fontainebleau.** -*Archit. Aujourd'hui,* (1955), 25, No. 57, 21.

1-07771 — LOKAY (H.E.). **Controlling voltage in distribution systems.** -*Westingho, Engr.* (1955), 15, No. 2, 50-5.

1-07772 — LOPEZ (R.). **H.L.M. Aubervilliers.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 24-5.

1-07773 — LOPEZ (R.) et REBY (M.). **Caisse contrale d'allocations familiales à Paris.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 32-9.

1-07774 — MACABERY (Ch.). **La finition des dentures d'engrenages par shaving.** *Rev. Gen. Mécan.* (1955), 39, No. 74, 65-75.

1-07775 — McGOWAN (J.K.) and VIVAIN (H.E.). **Studies in cement-aggregate reaction XXIII. The effect of superincumbent load on mortar bar expansion.**-*J. Appl. Sci.* (1955), 6, No. 1, 94-9.

1-07776 — MEUNIER (A.). **Le calfeutrement des joints de dilatation et de contraction dans le batiment et les travaux publics.** *Ann. Inst. Batim.* (1955), 8, No. 89, 451-66.

1-07777 — MERKELBACH et ELLING. **Unité résidentielle Amsterdam.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 81.

1-07778 — MEO (G.), COSTANTINI (F.), et COURTOIS (M.). **La reconsttuction du Pont de Pont-de-l'Arche sur l'Eure et la Basse Seine. Note sur l'exécution du nouveau pont.** *Travaux.* (1955), 39, No. 246, 368-76.

1-07779 — MIRABAUD (L.). **Immeuble square Mozart à Paris.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 80-2.

1-07780 — MOLIN (P.). **La plaine des Traffa.** *Travaux.* (1955), 39, No. 244, 120-38.

1-07781 — MONNET (B.). **Extension, maison de l'Europe Strasbourg, France.** *Archit, Aujourd'hui,* (1955), 26, No. 58, 44-5.

1-07782 — MOCHEL (N.L.). **Engineering personality.** *Westingho, Engr.* (1955), 15, No. 2, 56-7.

1-07783 — MAJON (M.). **Les machines de forge. Leur utilisation rationnelle.** -*Prat. Industr. Méc.* (1955), 42, No. 4, 91-4.

1-07784 — MANFREDINI (E.). **Grand seminaire à Reggio Emilia, Italie.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 68-73.

1–07785 — MARCHAND (E.), LEROY (J.) et MIET (M.). **Le repérage des indices horaires dans les postes de distribution à moyenne tension le réseau.** *Rev. Gen. Elect.* (1955), 64, No. 1, 1, 13-8.

1–07786 — MATHIS (P.). **L'autoroute Casablanca-Rabat.**-*Travaux.* (1955), 39, -No. 244, 53-64.

1–07787 — **Matériaux:Un nouveau matériau stratifié:resine stratyl fibre de verre.**-*Prat. Industr. Méc.* (1955),-42, No. 4, 110.

1–07788 — MAZET (C.C.). **Groupe scolaire Langevin à Sète, France.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 74-5.

1–07789 — MAZET (C.C.). **Villa de l'architecte à Beziets, France.** *Archit. Aujourdui,* (1955), 26, No. 58, 93.

1–07790 — MAZET (C.C.). **Immeuble en copropriété à Beziers, France.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 86-7.

1–07791 — NASITTA (KH.). **Uber die Dimensionierung dunner Kreisplatten unter exzentrisch aufgebrachten Einzellasten.** (On the dimensioning of thin circular plates under oxcetrically applied concentrated loads). *Ingen. Arch.* (1955), 23, No. 2, 85-101.

1–07792 — NASLIN (P.). **Second international symposium on high speed photography and cinematography.** *J. Photogr. Sci. Section B.* (1955), 3, No. 3, 95-6.

1–07793 — NICHOLSON (D.S.). **Wartime search for uranium in in New Zealand.** *N.Z.J. Sci. Tech. (Sect. B.).* (1955), 36, No. 3, -375-96.

1–07794 — NICKEL (K.). **Uber spezielle Systeme von Tragflugel-gittern. II. Theorie der dunnen Profile.** (On special systems of airfoil wings girsd. II. (Theory of thin profiles). *Ingen. Arch.* (1955), 23, No. 2, 102-18.

1–07795 — NIERMANS. **Groupe d'H.L.M. Puteaux.** *Archit. Aujourd'hui.* (1955(25, No. 57, 18-9.

1–07796 — **Nouvelle bride de montage sur machine.** *Prat. Industr. Méc.* (1955), 42, No. 4, 104-5.

1–07797 — **Nouveaux hangars de l'aeroport d'Orly, France.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 4-7.

1–07798 — ODIER (L.). **La construction d'une piste d'envol, sur la base aérienne de Meknès.** *Travaux.* (1955), 39,-No. 244, 214-24.

1–07799 — **Off-peak heating for buildings.** *Elect. J.* (1955), 154, No. 13, 1051-4.

1–07800 — OKUBO (H.). **Die Formzahlen tordierter Wellen mit mehreren Nuten.**(Stress concentration fastors of trusted shafts with ssveral notches). *Ingn Arch.* (1955), 23, No. 2, 130-2.

1 -07801 — PAHLITZSCH (G.). **Low temperature colling, a means of increasing cutting tool life.** *Microtecnic,* (1955), 9, No. 2, 64-9.

1–07802 — PARINET (P.). **Les nouveaux immeubles pour israélites marocains.** *Travaux.* (1955), 39, No. 244, 243-49.

1–07803 — PASCAL (J.). **Les manutentions mécanisées en fonderie.** *Métallurgie,* (1955), 87, No. 1, 23-7.

1–07804 — PETERSON (L.J.). **Lighting for precision manufacturing.** *Illum. Engng.* (1955), 50, No. 4, 173-4.

1–07805 — PHILIPPE (J.). **La fraiseuse Gambin 27 D. Biote à quarante vitesses pour la commande de la broche.** *Prat. Industr. Méc.* (1955), 42, No. 5, -122-31.

1–07806 — POTTER (W.M.) and RUSSELL (A.H.). **Measured utilization factors II.** *Illum. Engng.* (1955), 50, No. 4, 177-96.

1–07807 — POTTIER (H.). **Groupe d'habitations, Vaucresson.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 32-3.

1–07808 — POTTIER (H.). **Immeuble, Paris.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 33-4.

1–07809 — POWELL et MOYA. **Habitations, Gospel Aak, Londers.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 73.

1–07810 — POWELL et MOYA. **Unité d'habitation, Pimlico Londres.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 76-7.

1–07811 — POIROT (R.). **Aciers fontes et alliages divers pour moulage de piéces de pompe résistant à l'abrasion ou à la corrosion.** *Rev. Gen. Mécan.* (1955), 39, 75, 76-86.

1–07812 — POMMIER (A.). **Nouveaux développements de la technique des forages en grands diamètres pour fondations sur piles.** *Travaux.* (1955), 39, No. 246, 390-5.

1–07813 — PROMEYRAT (A.). **Groupe d'habitations, Antibes.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 51.

1–07814 — PROMEYRAT (A.). **Immeuble, Nice.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 50-1.

1–07815 — PROVELENGHIOS (A.). **Immeuble Ivry-sur -Seine.** *Archet. Aujourd'hui,* (1955), 25, No. 57, 30.

1–07816 — PROUVE (J.). **Elements de façades en aluminium.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 2-3.

1–07817 — RACLT (M.). **Les monnaies de référence au service des ingenieurs.** *Métallurgie,* (1955), 87, No. 2, 79-85.

1–07818 — **Rectifier ground power unit.** *Elect. J.* (1955), 15?, No. 13, 1066-7.

1–07819 — REMONDET (A.). **Université Européenne de la Sarre. Faculté des lettres.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 66-7?

1–07820 — REIFFEL (R.) et DANQUIGNY (J.). **Contribution à l'étude sur l'échantillonnage la réduction et l'analyse des combustibles minéraux solides.** *Chal. et Industr.* (1955), 36, No. 357, 129-36.

1–07821 — ROBERTS (J.A.) and VIVAIN (H.E.). **Studies in cement-aggregate reaction XXIV. The restoration of cracked mortar which has deteriorated through alkali-aggregate reaction.** *Aust. J. Appl. Sci.* (1955), 6, No. 1, 100-16.

1–07822 — ROBERT (O.). **Les décisions de la dixiéme conférence général des poids et mesures et du comité international des poids et mesures.** *Rev. Gen. Mécan.* (1955), 39, No. 71, 21-26.

1–07823 — ROLS (R.). **L'aluminium dans l'équipement électrique des usines.** *Rev. Gen. Elect.* (1955), 64, No. 2, 57-74.

1–07824 — ROOS (A.). **Valeur et interprétation des essais mécaniques des fontes grises.** *Rev. Gen. Mécan.* (1955), 39, No. 71, 1-20.

1– 07825—ROST H(.O.). **The mercury vapor lamp as a circuit component.** *Illum. Engng.* (1955), 50, No. 6, 302-6.

1–07826 — ROUNDS (TH.R.). **Superprecision ball-bearings.** *Microtenic,* (1955), 9, No. 2, 85-91.

1–07827 — ROUX (J.). **Le chenal évacuateur de cruss du torrent le Cady à Vernet les bains.** *Ann. Ponts. Chaux.* (1955), No. 1, 47-66.

1–07828 — ROUX (J.). **Le chenal évacuateur de crues du torrent le Cady à Vernet les bains.** *Ann. Ponts. Chaux.* (1955), No. 2, 123.

1–07829 — RUDIGER (D.). **Die strenge Thesrie anisotroper prismatischer Flatwerke.** (The rigid theory of anisotropic prismatic). *Ingng. Arch.* (1955), 23, No. 2, 133-50.

1–07830 — SCOTT (M.). **Station terminale d'autobus à Dublin Irlande.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 48-51.

1-07831 — SCHNEIDER-ESLEBEN (P.). **Habitation près de Dusseldorf Allemagne.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 92.

1–07832 — SCHROEDER (G.C.). **Dignity and warmth for a church interior.** *Illum. Engng.* (1955), 50, No. 6, 269-70.

1–07833 — SCHUHL (A.). **Le calcul des probabilités et la répartition des véhicules sur les routes à deux voies de circulation.***Travaux.* (1955), 39, No. 243, 16-8.

1–07834 — SCHUEPP (P.), GION (L.) et DEBERON (J.). **Etude des surcharges mécaniques subies par lee isolateurs de lignes électriques dans les conditions normales d'exploitation.** *Rev. Gen. Elect.* (1955), 64, No. 2, 83.

1–07835 — SEGAL (S.M.). **A study of high intensity light sources.** *Illum. Engng.* (1955), 50, No. 5, 259-62.

1–07836 — SIEGAL (A.). **Lighting design for a church.** *Illum. Engng.* (1955), 50, No. 5, 219-20.

1–07837 — SIRVIN (P. Et. P.). **Cité-jardins Chatenay-Malabry.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 42-3.

1–07838 — SURLEAU (H.). **La construction du nouveau mole du bassin Delpit.** *Travaux.* (1955), 39, No. 244, 76-80.

1–07839 — SURLEAU (H.). **Les travaux de prolongement de la jetée Delure.** *Travaux.* (1955), 39, No. 244, 71-6.

1–07840 — **Soudage:le soudage par pression à froid.** *Prat. Industr Méc.* (1955), 42, No. 4, 109-10.

1–07841 — SOULIER (G.). **Les petits moteurs universels. Caractéristiques, réglage choix et application.** *Prat. Industr. Méc.* (1955), 42, No. 4, 85-90.

1–07842 — SOURDEAU (J.L.) et CROZET (J.). **Caisse de la sécurité à Marseille, France.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 40-1.

1–07843 — TALLIS (J.R.). **What is wrong with the Coal industry?** *Trans. Instn. Min. Engrs, London,* (1955), 114, No. 5, 415-22.

1–07844 — TAO (W.). **Fluorescent stage lighting for school auditriums.** *Illm. Engng.* (1955), 50, No. 5, 221-4.

1–07845 — TCHEREPENNIKOFF (I.). **Détermination des conditions optima de mise en place des remblais.** *Ann. Ponts. Chaux.* (1955), No. 1, 67-106.

1–07846 — TOURNON (P.). **Eglise du Sacré-Coeur de Casablanca.** *Travaux.* (1955), 39, No. 244, 250-2.

1–07847 — TRICHOT (G.). **Vérin hydraulique permettant d une facon trés simple la mise à niveau précise des charges importantes.** *Equipem. Mécan.* (1955), 34, No. 306, 16-9.

1–07848 — VIATGE (P.) et CASTAING (F.). **Archives de la Haute-Garonne à Toulouse, France.** *Archit. Aujourd'hui,* (1955), 26, No. 58, 42-3.

1–07849 — VICENT (Z.) and DE FERRANTI (M.C.). **La conférence mondiale de l'énergie** *J. Instn. Elect. Engrs.* (1955), 1, No. 1, 73-5.

1–07850 — VIE (G.). **Nouvelles améliorations en matière de minage.** *Equipem. Mécan.* (1955), 34, No. 306, 12-3.

1–07851 — VAGO (P.). **Institution Jeane d'Arc à Montrouge, France.** *Archit, Aujourd'hui,* (1955), 26, No. 58, 77-9.

1-07852 — VARISCO (T.). **Groupe d'habitations, Milan.** *Archit. Aujourd'hui,* (1955), 25, No. 57, 90-1.

1–07853 — VIVIEN (P.). **Institut des combustibles de l'énergie à Paris.** *Archit. Aujourd'hui,* (1955)' 26, No. 58, 20-5.

1–07854 — WALTER (L.). **Gas turbines abroad.** *Elect. J.* (1955), 154, No. 14, 1137-9.

1–07855 — WIENE (P.E.). **Essais de fatigue sur ds piéces de moteur Diesel de grandeur nature.** *Rev. Gen. Mécan.* (1955), 39, No. 74. 51-8.

1–07856 — WISEMAN (R.S.). **Brightness and illumination by interreflections in enclosures.** *Illum. Engng.* (1955), 50, No. 5, 227-55.

1–07857 — YOUNG (A.F.B.) and LEGG (D.). **Some photography techniques in industrial electrical research.** *J. Photogr. Sci. Section, B.* (1955), 3, No. 1, 10-20.

1–07858 — YOUNG (J.W.). **Electric discharge lamps in street lighting service.** *Il um. Engng.* (1955), 50, No. 1, 19-28.

1–07859 — YOUNG (M.H.). **Ventilated auger mining at Hucknall colliery.** *-Trans. Iàst. Min. Engrs, London,* (1955), 114, No. 4, 337-66.

1–07860 — ZEFFERT (H.). **Electrical installation of B.E.A. Vickers Viscounts.** *Elect. J.* (1955), 154, No. 13-1061-5.

J. Agricultural Sciences and Veterinary

J 1. AGRICULTURE, GENERALITIES

1-07861 — ANDREW (C.S.) and BRYAN (W.W.). **Pastures studies on the coastal lowlands of subtropical Queensland I. Introoduction and initial plant nutrien studies.** *Aust. J. Agric. Res.* (1955), 6, No. 2, 265-90.

1-07862 — JONES (H.). **A device for obtaining photographs from an appreciable height above the ground.** *J. Ecol.* (1955), 43, No. 1, 72-3.

J 2. PEDOLOGY. AGRICULTURAL MICROBIOLOGY and METEREOLOGY.

1-07863 — ATKINSON (R.G.) and ROBINSON (J.B.). **The application of nutritional grouping method to soil fungi.** *Canad. J. Bot.* (1955), 33, No. 3, 281-8.

1-07864 — BECKWITH (R.S.). **Studies of soil manganese. I. The use of disodium calcium versenate for the extraction of divalent manganese from siols.** *Aust. J. Agric. Ees.* (1955), 6, No. 2, 299-307.

1-07865 — BOLTON (E.F.), FULTON (J.M.) and AYLESWORTH (J.W.). **The effects of two soil conditioners on some phycical properties of a Brookston clay soil.** *Canad. J. Agric. Sci.* (1955), 35, No. 1, 51-7.

1-07866 — BROCKMAN (F.J.) and ALLENBY (O.C.W.). **Factors affecting the laboratory evaluation of soil conditioners.** *Canad. J. Agric. Sci.* (1955), 35, No. 1, 27-35.

1-07867 — BRYAN W.W.) and ANDREW (C.S.). **Pasture studies on the coastal lowlands of subtropical Queensland II. The interrelation of legumes,** Rhizobium **and calcium.** *Aust. J. Agric. Res.* (1955), 6, No. 2, 291-8.

1-07868 — BLINKOV (G.N.). **In Russian.** (Influence of added salts on Azotobacter chroococcum and Azotobacter galophilm). *Microbiology, Moscow,* (1955), 24, -No. 1, 43-7.

1-07869 — HENDERSON (M.E.K.) and FARMER (V.C.). **Utilization by soil fungi of p-hydroxybenzaldehyde, ferulic acid syringaldehyde and vanillin.** *J. Gen. Microbiol,* (1955), 12, No. 1, 37-46.

1-07870 — IMSHENETSKY (A.A.). **In Russian.** (Myxobacteria mistaken for nitrifying bacteria). *Microbiology, Moscow,* (1955), 24, No. 1, 14-21.

1-07871 — JACKMAN (R.H.). **Organic phosphorus in New Zealand slsio under pasture: I. Conversion of applied phosphorus into organic forms.** *Siol. Sci.* (1955), 79, No. 3, 207-13.

1-07872 — KRISHNAMOORTHY (C.) and DESAI (A.D.). **Kinetics of** ion **exchange between two adsorbents III. Hydrogen and hydroxyl systems.** *Soil. Sci.* (1955), 79, No. 3, 215-20.

1-07873 — KOCK (P.C.). **Iron nutrition of plants at high pH.** *Soil. Sci.* (1955), 79, No. 3, 167-75.

1-07874 — LUTWICK (L.E.), MacLEAN (A.J.) and BISHOP (R.F.). **Fertility studies on siol types. V. The effect of continued cropping in the greenhouse on the phosphorus supplying power of siols.** *Canad. J. Agric. Sci.* (1955), 35, No. 2, 101-10.

1-07875 — LIBOUTRY (L.). **L'origine des sols striés et polygonaux des Andes de Santiago (Chili).** *C. R. Acad. Sci., Paris,* (1955), 240, No. 18, 1793-4.

1-07876 — MACKAY (D.C.) and DELONG (W.A.). **Coordinated soil-plant analysis. III. Exchange equilibria in siol suspensions as possible indicators of potassium abailability.** *Canad. J. Agric. Sci.* (1955), 35, No. 2, 181-88.

1-07877 — MARTIN (A.E.) and REEVE (R.). **A rapid manometric method for determining siol carbonate.** *Soil. Sci.* (1955), 79, No. 3, 187-97.

1-07878 — CHUDNOVSKY (A.F.). **In Russian.** (Mechanism and and role of the condensation occuring in the soil). *J. Tech. Phys., Moscow,* (1955), 25, No. 1, 149-57.

1-07879 — DI MENNA (M.E.). **A search for pathogenic species of yeasts in New Zealand siols.** *J. Gen. Microbiol,* (1955), 12, No. 1, 54-62.

1-07880 — DOUGALL (H.W.). **Correction of crude-fibre estimation for the effect of altitude.** *Nature, London,* (1955), 175, No. 4465, 952.

1-07881 — ORCHISTON (H.D.). **Adsorpton of water vapor: IV. Characterization of expanding lattice minerals at 25 C.** *Soil. Sci.* (1955), 79, No. 3, 221-4.

1-07882 — POYANSKY (N.A.). **In Russian.** (The effciency of the nitrogen bacteria prepared on sapropel). *Microbiology, Moscow,* (1955), 24, No. 1, 57-61.

1-07883 — PURI (B.R.), SINGH (J.) and SHARMA (L.R.). **Acidiod value and surface area of soil separates.** *Soil. Sci.* (1955), 79, No. 3, 199-305.

1-07884 — RUBENCHICK (L.I.). **In Russian.** (Some controversial questions on the role of the siol microorganisms in the nutrition of plants). *Microbiology, Moscow,* (1955), 24, No. 2, 229-33.

1-07885 — RUNOV (E.V.) and ENIKEEVA (M.G.). **In Russian.** (Influence of tree- and bush-residues on the microflora of the black soil of the dry steepe). *Microbiology, Moscow,* (1955), 24 No. 1, 48-56.

1-07886 — SHEARD (R.W.) and CALDWELL (A.G.). **The use of anion-exchange resins in phosphorus fertility studies.** *Canad. J. Agric. Sci.* (1955), 25, No. 1, 36-41.

1-07887 — SWENSON (R.M.) and RICKEN (F.E.). **Movement of iron in the development of loess derived brunizem soils.** *Soil. Sci.* (1955), 79, No. 3, 177-86.

1-07888 — WARCUP (J.H.). **Isolation of fungi from hyphae present in soil.** *Nature, London,* (1955), 175, No. 4465, 953.

J 3. FARMING, VEGETAL PRODUCTION.

1-07889 — BURROWS (V.D.) and OLSON (P.J.). **Reaction of small grains to various densities of wild mustard and the results obtained after their removal with 2,4-D or by hand. I. Experiments with wheat.** *Canad. J. Agric. Sci.* (1955), 35, No. 1, 68-75.

1-07890 — BURROWS (V.D.) and OLSON (P.J.). **Reaction of small grains to various densities of wild mustard and the results obrained after their removal with 2,4-D of by hand. II. Experiments with flax.** *Canad. J. Agric. Sci.* (1955(, 35, No. 2, 193-201.

1-07891 — CLARK (P.J.) and JACKS (H.). **Arsenic residues on apples.** *N.Z.J. Sci., Tech. (Sect. B.)* (1955), 36, No. 3, 344-6.

1-07892 — BLACK (J.N.). **The influence of depth of sowing and temperature on pre-emergence wieght changes in subterranean clover** (Trifolium subterraneum L.). *Aust. J. Agric. Res.* (1955), 6, No. 2, 203-11.

1-07893 — DOUGLAS (J.W.E.H.S.). **Soilles cultivation of crops in India.** *Nature, London*, (1955), 175, No. 4464, 884-5.

1-07894 — BROADBENT (L.). **The effects of dates of planting and harvesting potato crops on virus-disease incidence and yield.** *Ann. Appl. Biol.* (1955), 43, No. 1, 149.

1-07895 — HALL (I.V.). **Florstic changes following the cutting and burning of a woodlot for bleuberry production.** *Canad. J. Agric. Sci.* (1955), 35, No. 2, 143-52.

1-07896 — HEENEY (H.B.), BISHOP (R.F.) and HILL (H.). **The relationship of soil phosphorus tests to crop yield and to the requirement of the tomato for phosphatic fertilizer.** *Canad. J. Agric. Sci.* (1955), 35, No. 1, 11-8.

1-07897 — IVANOVSKAYA (A.A.). **In Russian.** (Growth and foramation of the Chinese lemon on different supporting plants). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 5, 1013-5.

1-07898 — JONES (F.G.W.), DUNNING (R.A.) and HUMPHRIES (K.P.). **The effects of defoliation and loss of stand upon yield of suga beet.** *Ann. Appl. Biol.* (1955), 43, No. 1, 63-70.

1-07899 — LICHIKAKI (V.M.). **In Russian.** (The dynamics of the resistance to cold weather of the winter-crop wheat in field fleld conditions). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 805-8.

1-07900 — MacVICAR (R.M.) and GIBSON (D.R.). **The use of desiccants for the pre-harvest treatment of legume seed crops.** *Cand. J. Agric. Sci.* (1955), 35, No. 1, 83-90.

1-07901 — MORRISON (J.W.). **Fertilization and postfertilization development in wheat.** *Canad. J. Bot.* (1955), 33, No. 2, 168-76.

1-07902 — PELTON (W.L.) and WEBBER (L.R.). **The effects of irrigation and chemical fertilization on the yield and protein content of a pasture mixture.** *Canad. J. Agric. Sci.* (1955), 35, No. 1, 1-10.

1-07903 — RICARD (J.). **Variabilité comparée de la longueur des coléoptiles et des racines dans une population de blé.** *C. R. Acad. Sci., Paris*, (1955), 240, No. 6, 647-9.

1-07904 — SALLES (G.J.). **L'industrie des amendements calcaires dans l'économie nationale.** *Equipem. Mécan.* (1955), 34, No. 306, 10-1.

1-07905 — SHOLNIK (M. Ya.) and STEKLOVA (M.M.). **In Russian.** (The importance of phosphorus, boron and hydrogen peroxide in the carrying out of the jarovisation of winter-crop plants). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 591-4.

1-07906 — VINBERG (G.G.), GODNEV (T.N.) and GAPONENKO (V.I.), **In Russian.** (The application of the radio-isotope of phosphorus to the study of the ferilization of ponds). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 3, 575-8.

1-07907 — VOLODARSKY (N.I.). **In Russian.** (The infiluence of leaves of different ages on the time of budding of tobacco). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 797-800.

1-07908 — VOZNYAKOVSKAYA (Yu. M.). **In Russian.** (Manuring and the microflora of the soil). *Microbiology, Moscow*, (1955),

J 4. PURE and APPLIED PHYTOPATHOLOGY, PESTS

1-07909 — CROWLAY (N.C.). **The effect of seed extracts on the infectivity of plant viruses and its bearing on seed trasmission.** *Aust. J. Biol. Sci.* (1955), 8, No. 1, 56-67.

1-07910 — DAVIDSON (T.R.) and SANFORD (G.B.). **Expression of leaf-roll pholoem necrosis in potato tubers.** *Canad. J. Agric. Sci.* (1955), 36, No. 1, 42-7.

1-07911 — DAVIDSON (T.R.). **Rate of development of potato leaf-roll vine symptoms.** *Canad. J. Agric. Sci.* (1955), 35, No. 1, 48-50.

1-07912 — GREEN (G.J.) and JOHNSON (T.). **Specificity in the effect of high temperature on the adult plant reaction of wheat varieties to races of stem rust.** *Canad. J. Bot.* (1955), 33, No. 2, 197-201.

1-07913 — HOLLINGS (M.). **Investigation of chrysanthemum viruses. I. Aspermy flower distation.** *Ann. Appl. Biol.* (1955), 43, No. 1, 86-102.

107914 — KASSANIS (B.). **Some proprties of four viruses isolated from carnation plants.** *Ann. Appl. Biol.* (1955), 43, No. 1, 103-13.

1-07915 — KAPKOVA (E.A.). **In Russian.** (Results of the use of phosphorus oganic compounds against wheat pests). *C. R. Acad. Sci. U.R.S.S.* (1955), 100, No. 4, 813-5.

1-07916 — LUCAS (R.L.). **A comparative study of** Ophiobolus graminis **and** Fusarium culmorum **in saprophytic colonization of wheat straw.** *Ann. Appl. Biol.* (1955), 43, No. 1, 134-43.

1-07917 — LIPSON (M.) and HOPE (R.L.). **Use of 'Dieldrin' to protect wool against insect attack.** *Nature, London*, (1955), 165, No. 4457, 599.

1-07918 — MCKEE (R.K.). **Host-parasite relationships in the dry-rot disease of potatoes.** *Ann. Appl. Biol.* (1955), 43, No. 1, 147-8.

1-07919 — PEAKE (R.W.) and CORMACK (M.W.). **Effect of bacterial wilt on hay yie d of irrigated alfalfa.** *Canad. J. Agric Sci.* (1955 , 35, No. 2, 202-10.

1-07920 — STACE-SMITH (R.). **Studies on Rubus virus diseases in British Columbia. I. Rubus yellow-net.** *Canad. J. Bot.* (1955), 33, No. 3, 269-74.

1-07921 — TOMLINSON (N.) nd WOODBRIDGE (C.G.). **Evaluation of a colorimetric and ultraviolet absorption test for diagosis of plant virus diseases applied to stone and small fruits.** *Cand. J. Agric. Sci.* (1955), 35, No. 2, 111-23.

1-07922 — VAN RYSSELBERGE (C.) and JEENER (R.). **The ro'e of the soluble antigens in the multiplication of the tobaco mosaic virsus.** *Biochem, Biophys, Acta.* (1955), 17, No. 1, 158-9.

1-07923 — ILLER (W.G.). **Studies of western tree rusts. II.** Melampsora occidentalis **and** M. albertrensis **twe needle rusts of douglas fir.** *Canad. J. Bot* (1955), 33, No. 2, 177-88.

J 5. FORESTY.

1-07924 — CARR (D.R.). **Diffusion impregnation of timber by the momentary immersion process.** *N.Z.J. Sci., Tech. (Sect. B.).* (1955), 36, No. 3, 351-62.

1-07925 — KOEPPEN (A.). and CHOEN (W.E.). **Pulping studies of five species of a mangrove association.** *Aust. J. Appl. Sci.* (1955), 6, No. 1, 105-16.

1-07926 — O'CONNOR (F.B.). **Extraction of enchytraeid worms from a coniferous forest soil.** *Nature, London*, (1955), 175, No. 4462, 815-6.

1-07927 — STEBBING (E.P.). **Forestry research in Great Britain.** *Nature, London*, (1955), 175, No. 4465, 934-5.

1-07928 — TRIBUNSKAYA (A.Ya.). **In Russian.** (Study of the microflora of the rhizosphere of pine tree seedlings). *Microbiology, Moscow*, (1955), 24, No. 2, 188-92.

J 6. ZOOTECHNIC.

1-07929 — ALLEN (K.R.). **Factors affecting the efficiency of restricityve regulations in fisheries management:II-bag limits.** *N.Z.J. Tech. (Sect. B.)*, (1955), 36, No. 3, 305-34.

1-07930 — BRAUDE (R.). **Efficiency of food utilization in pigs.** *Proc. Nutr. Soc.* (1955), 14, No. 1, 14-23.

1-07931 — BOLTON (W.). **Factors affecting the efficiency of food conversion in poultry.** *Proc. Nutr. Soc.* (1955), 14, No. 1, 23-22.

1-07932 — CHARETTE (L.A.) and TESSIER (J.L.). **Snow as a water replacement for poultry.** *Canad. J. Agric. Sci.* (1955), 35, No. 2, 175-80.

1-07933 — EDWARDS (J.). **Food conversion in dairy cattle.** *Proc. Nutr. Soc.* (1955), 14, No. 1, 1.

1-07934 — FRANKLIN (M.C.), McCLYMONT (G.L.), BRIGGS (P.K.) and CAMPBELL (B.L.). **Maintenance rations for Merino sheep. II. The performance of weaners fed daily and weekly on rations of wheat and wheaten chaff at mainstenance levels and the effect thereon of vitamin A supplements.** *Aust. J. Agric. Res.* (1955), 6, No. 2, 324-42.

1-07935 — GLOVER (R.S.). **Science and the herring fishery** *Advance. Sci.* (1955), 11, No. 44, 426-34.

1-07936 — MacINTYRE (T.M.). **The digestibility of dried ground seaweed meal by the laying hen.** *Canad. J. Agric. Sci.* (1955), 35, No. 2, 168-74.

1-07937 — MUROMTZEV (S.N.). **In Russian.** (The problems of the agricultural microbiology in the light of the decisions of the January Plenum of the Central Committée of the C.P.S.U. on the increase of the production of livestock raising). *Microbiology, Moscow,* (1955), 24, No. 2, 129-36.

1-07938 — TANEJA (G.C.). **The relative importance of heredity and environment in body weight increments at different ages in austalrian Merino sheep.** *Aust. J. Agric. Res.* (1955), 6, No. 2, 343-9.

1-07939 — TSUJITA (M.). **Cytoplasmic polyhedral virus infecting the silkworm.** *Proc. Jap. Acad.* (1955), 31, No. 2, 93-8.

1-07940 — WALLACE (L.R.). **Factors influencing the efficiency of feed conversion by sheep.** *Proc. Nutr. Soc.* (1955), 14, No. 1,7-13.

J 7. VETERINARY MEDICINE.

1-07941 — BAIN (R.V.S.) and JONES (R.F.). **Studies on haemorrhagic septicaemia of cattle III. Production of adjuvant vaccine.** *Brit. Vet. J.* (1955), 3, No. 1, 30-4.

1-07942 — BLAIR (G.W.S.) and GLOVER (F.A.). **Early pregnancy tests from studies of bovine cervical mucus.** *Brit. Ver. J.* (1955), 3, No. 1, 3-11.

1-07943 — BLACK (D.A.K.). **Mineral metabolism in alimentary disease.** *Proc. Nutr. Soc.* (1955), 14, No. 1, 50-4.

1-07944 — BOULLAUD (M.) et RESSES (R.). **Groupement de défense contre les maladies des animaux de la Vendée. statistiques les résultats techniques de tuberculinations.** *Bull. Acad. Vét. Fr.* (1955), 28, No. 1, 35-44.

1-07945 — BOOKSBANK (N.H.) and AUSTWICK (P.K.C.). **Susceptibility of inbred and outbred chicks to aspergillosis.** *Brit. Vet. J.* (1955), 3, No. 2, 64-7.

1-07946 — COATES (M.E.), DAVIES (M.K.) and KON (S.K.). **The iffect of antibiotics on the intestine of the chick.** *Brit. J. Nutr.* (1955), 9, No. 1, 110-9.

1-07947 — CAMY (M.). **Papillome granuleux des cavités nasales du mouton.** *Bull. Acad. Vét. Fr.* (1955), 28, No. 1, 31-4.

1-07948 — DUNN (D.R.). **The culture of earthworms and their infection with** Metastrongylus **species.** *Brit. Vet. J.* (1955), 3, No. 3, 97-101.

1-07949 — EL-HEHYAWI (G.E.). **A study of the analysis of blood and urine in puppies.** *Brit. Vet. J.* (1955), 3, No. 2, 73-7.

1-07950 — FRENCH (J.M.). **Disorders of fat absorption** *Proc.. Nutr. Soc.* (1955), 14, No. 1, 33-41.

1-07951 — GRAIDWOOD (R.H.). **The absorption of vitamins in disorders of the alimentary tracy.** *Proc. Nutr. Soc.* (1955), 14, No. 1, 41-50.

1-07952 — GORDH (T.) and ASTROM (A.). **Respiratory effects of oxygen deficiency and carbon dioxide excess during ether and barbiturate anesthesia in the dog.** *Anesthesiology,* (1955), 16, No. 2, 245-53.

1-07953 — GUNNING (O.V.). **Scrotal hernia and cryptorchidism in the pig.** *Brit. Vet. J.* (1955), 3, No. 3, 122-4.

1-07954 — HARRISS (S.T.). **Chloramphenicol (chloromycetin) and foot-rot in sheep.** *Brit. Vet. J.* (1955), 3, No. 5, 207-11.

1-07955 — HARISS (S.T.). **Terramycin and foot-rot in sheep.** *Brit. Vet. J.* (1955), 3, No. 5, 212-14.

1-07956 — HARRY (E.G.) and GORDON (R.F.) and TUCKER (J.F.). **The destruction of day-old chicks.** *Brit. Vet. J.* (1955)' 3, No. 4, 150-63.

1-07957 — HUGHES (D.L.). **Arthritis in pigs. The experimental disease induced by** Erysipelothris rhusiopathiae. *Brit. Vet. J.* (1955), 3, No. 5, 183-94.

1-07958 — HILL (D.H.). Ttypanosoma brucei **in the cat.** *Brit. Vet. J.* (1955), 3, No. 2, 77-80.

1-07959 — JONDET (R.). **Essai de détermination du moment optimum pour l'insémination de la vache.** *Bull. Acad. Vét. Fr.* (1955), 28, No. 2, 75-5.

1-07960 — JOHNSON (J.E.) and HAXBY (D.L.). **Bovine foetal anasarca associated with prolonged gestation and dystokia.** *Brit. Vet. J.* (1955), 3, No. 2, 80-2.

1-07961 — KRISTJANSSON (F.K.) and GWATKIN (R.). **The effect of infectious atrophic rhinites on weight for age in swine.** *Canad. J. Agric, Sci.* (1955), 35, No. 2, 139-42.

1-07962 — KUME (S.) and ITAGAKI (Sh.). **On the life-cycle of Dirofllaria immitus in the dog as the final hos** *Brit. Vet. J.* (1955), 3, No. 1, 16-24.

1-07963 — KERR (W.R.). **Vaginal and uterine antibodies in cattle with particular reference to** Br. abortus. *Brit. Vet. J.* (1955), 3, No. 4, 169-78.

1-07964 — KAMEL (Sh. H.). **Some observations on the effects of environment on mice doses with dinitro-ortho-cresol.** *Brit. Vet. J.* (1955), 3, No. 1, 34-7.

1-07965 — LAMOUROUX, LEBEAU et SANSON. **Un cas de cancer parathyriodien chez le chien.** *Bull. Acad. Vét. Fr.* (1955), 28, No. 1, 25-30.

1-07966 — LEBEAU (A.). **Infarctus hémorragique de la rate chez la chien.** *Bull. Acad. Vét. Fr.* (1955), 29, No. 2, 59-62.

1-07967 — LINDLEY (E.P.). **Anthrax:career state in goats.** *Brit. Vet. J.* (1955), 3, Nj. 5, 215-16.

1-07968 — LINDLEY (E.P.). **Preliminary observations on a flocculation test in studies on blackleg vaccine.** *Brit. Vet. J.* (1955), 3, No. 3, 87-96.

1-07969 — LOCKLEY (R.M.). **Failure of myxomatosis on Skokholm island.** -*Nature, London,* (1955), 175, No. 4464, 906-7.

1-07970 — MAQSOOD (M.). **Effects of the thyroid gland on fleece growth in sheep.** *Brit. Vet. J.* (1955), 3, No. 4, 163.

1-07971 — MILES (B.E.) and CHURCHILL-DAVIDSON (H. C.). **The effect of hypothermia on the renal circulation of the dog. Anesthesiology.** (1955), 16, No. 2, 230-4.

1-07972 — MINCK (R.). **Organismes du type de la péripneumonie des bovidés et formes L des bactéries.** *Rev. Immunol.* (1955), 19, No. 1/2, 86-108.

1-07973 — MOORE (J.H.) and TYLER (C.). **Studies on the intestinal absorption and excretion of calcium and phosphorus in the pig. 1. A critical study of the Brgeim technique for investigating the intestinal absorption and excretion of calcium and phosphorus.** *Brit. J. Nutr.* (1955),'9, No. 1, 63-80.

1-07974 — MOORE (J.H.) and TYLER (C.). **Studies on the intestinal absorption and excretion of calcium and phosphorus in the pig. II. The intensinal absorption and excretion of radioactive calcium and phosphorus.** *Brit. J. Nutr.* (1955), 9, No. 1, 81-93.

1-07975 — NOUVEL (J.). **Note annexe sur la contention des grands carnivores.** *Bull. Acad. Vét. Fr.* (1955), 28, No. 1, 51-5.

1-07976 — PENNY (R.H.C.). **The topical application of 10 per cent chloramphenicol in spirit in the treatment of footrot in sheep.** *Brit. Vet. J.* (1955), 3, No. 3, 125-6.

1-07977 — PARNELL (I.W.); DUNN (A.M.), MACKINTOSH (G.M.) and REEVE (E.C.R.). **Observations on some preliminary dosing trails with a phenothiazine on hill lambs in Southern Scotland.** *Brit. Vet. J.* (1955), 3, No. 5, 195-206.

1-07978 — ROSSI (P.) et KOLOCHINE-ERBER, **La. leptospirose bovine clinique existe en France.** *Bull. Acad. Vét. Fr.* (1955), 28, No. 2, 63-71.

1-07979 — ROY (J.H.B.), SHILLAM (K.W.G.), PALMER (J.) and INGRAM (P.L.). **The nutritive value of colostrum for the caef. 11. The effect of aureomycin on the performance of colostrum-deprived calves.** *Brit. J. Nurt.* (1955), 9, No. 1, 94-103.

1-07980 — ROY (J.H.B.), PALMER (J.), SHILLAM (K.W.G.), INGRAM (P.L.) and WOOD (P.C.). **The nutritive value of colostrum for the calf. 10. The relationship between the period of time that a calfhouse has been occupied and the incidence of scouring and mortality in young calves.** *Brit. J. Nutr.* (1955), 9, No. 1, 11-9.

1-07981 — SHOHO (Ch.) and TANAKA (T.). **Further observation, en cerebrospinal nematodiasis in animals.** *Brit. Vet. J.* (1955). 3, No. 3, 102-11.

1-07982 — SHANKS (P.L.), SHARMAN (G.A.M.), ALLAN (R.), DONALD (L.G.), YOUNG (S.) and MARR (T.G.). **Experiments with myxomatosis in the hebrides.** *Brit. Vet. J.* (1955), 3, No. 1, 25-30.

1-07983 — TARVER (W.J.). **Ovine pregnancy toxaemia.** *Brit. Ve . J.* (1955), 3, No. 2, 68-72.

1-07984 — WRIGHT (J.G.). **The pattern of equine surgery as seen at the field station of the Lirerpool school.** *Brit. Vet. J.* (1955), 3, No. 2, 43-63.

1-07985 — WHITE E.G.). **The eggs of** Hysotrongyplus rubidig **Hallf 1921. A stomach worm of the pig and their recognition in pu faeces.** *Brit. Vet. J.* (1955), 3, No. 1, 11-5.

J 8. FOOD INDUSTRIES.

1-07986 — BAINES (A.H.J.) and HOLLINGSWORTH (D.F.). **The diets of elderly women living alone.** *Proc. Nutr. Soc.* (1955), 14, No. 1, 77-80.

1-07987 — BETTELHEIM (F.A.) and STERLING (C.). **Factors associated with potato texture. II. Pectic substances.** *Food. Res.* (1955), 20, No. 2, 118-29.

1-07988 — COOPER (M.McG.). **Beef production.** *Proc. Nutr. Soc.* (1955), 14, No. 1, 1-7.

1-07989 — BROWN (J.A.C.). **Economics nutrition and family budgets.** *Proc. Nuttr. Soc.* (1955), 14, No. 1, 63-70.

1-07990 — CROWTHER (R.E.) and TRUSCOTT (J.H.L.). **Note on the growth of flor yeats.** *Canad. J. Agric. Sci.* (1955), 35, No. 2, 211-2.

1-07991 — FREDEEN (H.T.), BOWMAN (G.H.) and STOTHART (J.G.). **Relationships between certain measurements of ham and carcass quality.** *Canad. J. Agric. Sci.* (1955), 35, No. 1, 95-9.

1-07992 — FREDEEN (H.T.), BOWMAN (G.H.) and STOTHART (J.G.). **Appraisal of certain methods for evaluation of ham quality.** *Canad. J. Agric. Sci.* (1955), 35, No. 1, 91.

1-07993 — GIBSON (E.H.), READMAN (W.L. and WARNOCK (G.M.). **Food and family size.** *Proc. Nutr. Soc.* (1955), 14, No. 1, 80-6.

1-07994 — GRISWOLD (R.M.). **The effect of different methods of cooking beef round of commercial and prime grades. II. Collagel fat and nitrogen content.** *Food, Res.* (1955), 20, No. 2, 171-9.

1-07995 — GRISWOLD (R.M.). **The effect of different methods of cooking beef round of commercial and prime grades. I. Palatability and shearvalues.** *Food. Res.* (1955), 20, No. 2, 160-70.

1-07996 — HOLLINGSWORTH (D.F.). **Nutritional pattern of the diet on the ave of decontrol.-***Proc. Nutr. Soc.* (1955), 14, No. 1, 71-7.

1-07997 — LEITCH (I.). **Some comments on the national food survey and comparision with the prewar carnegie survey.-***Proc. Nutr. Soc.* (1955), 14, No. 1, 86-92.

1-07998 — IRVINE (O.R.), BULLOCK (D.H.) and EDMOND (R.E.). **Parraffin and microcrystalline waxes as cheese coating matierals.** *Canad. J. Agric. Sci.* (1955), 35, No. 2, 153-67.

1-07999 — LUCKEY (TH.D.), WAGNER (M.), REYNIERS (J.A.) and FOSTER (F.L.) JR. **Nutritional adequacy of asemisynthetic diet sterilized by steam or by cathode ray.** *Food.Res.* (1955), 20, No. 2, 180-5.

1-08000 — McCREADY (R.M.), McCOMB (E.A.) and JANSEN (E.F.). **The action of tomato and avodado polygalacturonase.** *Food, Res.* (1955), 20, No. 2, 186-91.

1-08001 — MILNE (J.A.). **Food allergy.** *Proc. Nutr. Soc.* (1955), 14, No. 1, 54-6.

1-08002 — NAGHSKI (J.) WILLITS (C.O.) and PORTER (W. L.). **Paple sirup. VIII. A simple and rapid test for the analysis of maple sirup for invert sugar.** *Food. Ees.* (1955), 20, No. 2, 138-43.

1-08003 — NAVIA (J.M.), LOPEZ (H.), CIMADEVILLA (M.) FERNANDEZ (E.) VALIENTE (A.) CLEMENT (I.D.) and HARRIS (R.S.). **Nutreint composition of cuban foods I. Foods of vegetableorigin.** *Food. Res.* (1955), 20, No. 2, 97-113.

1-08004 — READMAN (W.L.). **Technique and methods of the national food survey.** *Proc. Nitr. Soc.* (1955), 14, No. 1, 60-3.

1-08005 — SHEPPARD (D.). **Descriptive terms and points systems for rating food qualities.** *Food. Res.* (1955), 20, No. 2, 114-7.

1-08006 — STERLING (C.) and BETTELHEIM (F.A.). **Factors associated with potato texture III. Physical attributes and general conclosions.** *Food, Ees,* (1944), 20, No. 2, 130-7.

1-08007 — WAGENAAR (R.O.) and DACK (G.M.). **Studies on canned cheese spread experimentally inoculated with spores of** Clostridium botulinum. *Food. Res.* (1955), 20, No. 2, 144-8.

1-08008 — WESTCOTT (D.E.), LIVINGSTON (G.E.), ESSELEN (W.B.) and FELLERS (C.R.). **Nonezymatic discoloration of green bean purée.** *Food. Res.* (1955), 20, No. 2, 149-59.

BIBLIOGRAPHICAL REVIEWS RECEIVED

Analytical Abstracts, (*London*), (1955), 2, Nos. 4, 5, 6.
Bibliographia Genetica, (*Gravenhage*), (1955), 15, Nos. 1/2, 3/4.
Bibliographic Index, (*New York*), (1954), June.
Bibliography of Industrial Diamond Application, (*London*), (1955), 12, Nos. 1-6.
Biological Abstracts (*Philadelphia*), (1955), 29, Nos. 1-5.
Book Review Digest (*New York*), (1955), 51, Nos. 1-4.
British Book News, (*London*), (1955), Nos. 173-177.
Building Science Abstracts (*London*), (1955), 28, Nos. 1-4.
Bulletin Analytique, (1*ère Partie*), (*Paris*), (1955), 16, No. 6.
Bulletin Analytique (2*ème Partie*), (*Paris*(, (1955), 16, No. 6.
Chemical Abstracts, (*Easton*), (1955), 49, Nos. 8-11.
Cumulative Book Index, (*New York*), (1955), 58, Nos. 1-6.
Current Chemical Papers (*London*), (1955), Nos. 5-6.
Dairy Science Abstracts, (*Sheinfield*), (1955), 17, Nos. 6-7.
Documentation Métallurgique (*St. Etienne*), (1955), Nos. 21-2.
Excerpta Medica, (*Amsterdam*).

Section. I. — Anatomy, Anthropology, Embryology and Histology (1955), 9, Nos. 5, 6.
Section. II. — Physiology, Biochemistry and Pharmacology, (1955), 8, Nos. 4, 5.
Section. III. — Endocrinology, (1955), 9, No. 5.
Section. IV. — Medical Microbiology, Immnology and Serology, (1955), 8, No. 5.
Section. V. — General pathology and pathological anatomy, (1955), 8, Nos. 5, 6.
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Section. VIII. — Neurology and Psychiatry, (1955), 8, No. 5.
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Section. XIV. — Radiology, (1955), No. 5.
Section. XV. — Tuberculosis and Pulmonary Diseases, (1955), 8, Nos. 5, 6.
Section. XVI. — Cancer, (1955), 3, No. 5.

Hungarian Technical Abstracts, (*Budapest*), (1954), 6, Nos. 1-4.

Index Medicus Danicus, (*Copenhagen*), (1953), 2, Nos. 4-7.

Index Veterinarius (*Wenbridge*), (1955), 27, Nos. 1-2.

Industrial Arts Index, (*New York*), (1955), 43, Nos. 5-7.

Insdoc List, Current Scientific Literature, (*New Delhi*), (1955), 2, Nos. 1-12.

Leukemia Abstracts, (*Chicago*), (1955), 3, No. 6.

Nuclear Science Abstracts (*Oak Ridge*), (1955), 9, Nos. 8, 9, 10.

Physikalische Berichte, (*Braunschweig*), (1954), 33, Nos. 1-11.

Physics Abstracts, (*London*), (1955), 58, Nos. 688, 689, 690.

Quarterly Cumulative Index Medicus, (*Chicago*), (1952), 5, Nos. 51, 52.

Referativnai Jurnal, (*Moscow*), (1954), Nos. 1-6.

Road Abstracts, (*London*), (1955), 22, Nos. 1-7.

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General review.O rganisation, theoretical and proctical teaching.

1-100193 — AHMED (Z.F.). **in arabic** (Atomic energy in the service of science I.). *Rep. Pharm. Soc. Egypt*, (1955), 37, No. 3, 7-9.
History.

1-100194 — AHMED (Z.F.). **in arabic** (Atomic energy in the service of Science. II. Internal structure of the atom.). *Rep. Pharm. Soc. Egypt*, (1955), 37, No. 4, 23-28.

1-100195 — EL AHRAF (M.S.). **in arabic** (How Egypt can make use of international research organisation for the cause of peace). *Resalt El-Elm. Cairo*, (1955), 21, No. No. 4, 190-5.
Atomic energy and its orign, its use as source for atomic motive power in medicine, biololgy, agriculture and industry.

1-100196 — FARRAG (M.K.). **in arabic.** (Developement of pharmacy sciences during 1954). *Rep. Pharm. Soc. Egypt*, (1955), 37, No. 3, 10-13.
About the discovery of new drugs in pharmacy during 1954.

1-100197 — MONTASER (A.). **in arabic** (Pedagogies of botany). *Resalet- El-Elm-Cairo*, (1954), 21, No. 4, 217-27.
In school, teacher training Books.

Astronomy and Geophysics.

1-100198 — ALY (M.K.). **Preliminary note on the measures of emission coronal lines at he total solar eclipse of 5 February 1952, observed by B. Lyot and M. K. Aly.** *Bull. Inst. Egypt*, (1955)' 36, No. 1, 237-252.

Recording of 138 emission coronal lines, 78 are graded certain the rest doubtful. 16 are certain lines not know before. Recording spectra in the blue and utraviolet beyond the scope of corona-group.

1-100199 — MADWAR (M.R.). **Magnetic observations in the Soudan January to February 1952.** *Bull. Inst. Egypt*, (1955), 36, No. 1, 5-16.
Description of method. Daily variation. Map.

1-100200 — YOUSEF (M.S.). **in arabic** (Geophysics, its problems, new tends and relation with world petroleum industry). *Resalet-El-Elm. Cairo*, (1954), 21, No. 4, 230-2.
Present situations and future problems developement of industry and field technical improvements developement of methods of investigation, cooperation between geologists and geophysicits

Pure and Applied Physics

1-100202 — FLEURI (G.). **Essai sur le principe de la massodynamique.** *Bull. Inst. Egypt*, (1955), 36, No. 1, 287-92.

Introduction en mécanique de l'énergie massique Expression. mathématique de cette nouvelle énergie.

Pure and Applied Chemistry

1-100203 — AMIN (A.). **in arabic** (Calignost or tetraphenyl boron, a new reagent for quantitative microdetermination of potassium). *Risalatul - Kimia. Damascus.*(1954), 2, No. 6, 407-17.

1-100204 — EL EMAM (M.). **in arabic** (Dyes:different applications of the organic dyes in industry). *Risalatul-Kimia. Damascus.* (1954), 3, No. 1, 24-33.

1–100025 — EL IMAM (M.). **in arabic.** (Theories of dyes). *Risalatul-Kimia. Damascus*, (1954), 2, No. 6, 399-406.

1–100206 — EL KAWARKBY (N.). **in arabic**. (Complexime tric titrations of calcuim in blood and body fiuids III.). *Risalatul-Kimia. Damascus.* (1954), 2, No. 6. 371-80.
A general review on the tiration of calcium with disodium salt of ethylene diamine tetra-acetic acid (complexon) in the presence of different indicators.

1–100207 — EL SAID (F.). **In arabic.** (Manufacture of drugs in Egypt. Its developement, and future). *Rep. Pharm. Soc. Egypt.* (1955), 37, No. 1, 30-34.
General review.

1–100208 — EL SAKKA (H.). **In arabic.** (Chlorophyll and carotin obtained from Alfalfa «Medicago Sativa"). *Risalatul-Kimia. Damascus.* (1954), 3, No. 1, 34-47.
Chemical structure, chemical characters, isolation and purifcation.

1–100209 — EL SAKKA (H.). **In arabic.** (Versines as a reagent in analytical chemistry). *Risalatul-Kimia. Damaseus.* (1954), 2, No. 6, 397-8.

1–100210 — GHEBA (Y.). **In arabic** (Bronsted theory and its application in pH measurements in non-aquous solution). *Risalatul-Kimia. Damaseus.* (1954), 3, No. 1, 4-19.

1–100211 — KHATTAB (S.). **In arabic.** (Chemistry of detergents.) *Resalt-el-Elm. Cairo*, (1954), 21, No. 4, 186-9.
The role of detergents in the cleaning process. Chemical contitution, general properties and behaviour in aqueous solutions. Detergen affIciency and its sstimatien.

1–100212 — SAID (A.A.). **In Arabic.** (Manufasture of vitamin B12). *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 10, 17-18.
A description for its preparation by fermenting Streptomyces olivaceus in proteinous solution under conditions of continuous stirring and presence of certain percentage of air for 12 hours.

1–100213 — SAID (A.A.). **In arabic.** (Yeast industry). *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 7, 14-16.
Description of the recent method which depends on using mollasss and differential process in its fermentation, and addition of ammonium salts and aeriation.

Geological Science

1–100214 — AMIN (M.S.) and KABESH (M.L.A.). **Some complex features of the epidiorite of Wadi Mubarak.** *Bull. Inst. Egypt.* (1955), 36, No. 1, 17-32.
The epidisrite mass of Wadi Mubarak (north-eastern sector of the Naba District, Barramiyia-East Sheet, Eastern Desert of Egypt), present some complex features as relics of fresh epi diorite, association with paraschists and granitic invasious and development of schistose belts.

1–100215 — EL HUSSINI (A.H.). **In arabic** (Pedagogies of geology). *Resalet-El-Elm. Cairo*, (1954), 21, No. 4, 199?216.
Ways of teaching suggested school syllapus for primary and secondary education.

1–100216 — LOWY (H.). **Thermal hysteresis of electric rock-constants.** *Bull. Inst. Egypt.* (1955), 36, No. 1, 33-5.
Measurement of resistivity and diclectrical countant of desert rocks different temperatures. Hysteresis phenomenon. Basalt, shals, Nubian sandstones.

1–100217 — MAHMOUD (I. G.E-D.). **Les céphalopodes crétacés du massif du Mohgara (Sinai-Egypte) note complémentare à l'ouvrage de H. Douvillé)**. *Bull. Inst. Egypt.* (1955), 36, No. 1 221-6.
Liste de 49 especes de l'aptien et Barrémien. Révision des espèces les moins connues de Knemiceras de Moghara. Critique du travail de M. Knechtel (1947) sur les fossiles mésozioques des Andes péruviennes.

1–100218 — NAKKADY (S.E.). **The stratigraphy and geology os the district between the northern and southern Galala plateaus (gulf of Suez coast Egypt.)** *Bull. Inst. Egypt.* (1955), 36, No. 1, 254-68.
Corrections of Geological Survey map. Description of a new jurassic forminifer *Aboudaragiua eponidelliformis NAKKADY* 1. Maps. 2 section.

1–100219 — OSMAN (A.A.). **Facies analysis of the mesozioe surface and sub-surf ace fomations of Abu-Roash based on percentages of characteristic microfaunal families and genera.** *Bull. Inst. Egypt.* (1955), 36, No. 1, 177-80.
Quantitative analysis. Diagrams.

1–100220 — OSMAN (A.A.). **Micro-stratigraphy of the upper creteceous formations of Abu-Roash.** *Bull. Inst. Egypt.* (1955), 36, No. 1, 181-91.
Geological maps. Quantitative generic micro-faunal chart. Verticol distribution of the arenaceous forminifers.

1–100221 — SHAWKI (M.Y.). **The Fayum fossil bone field.** *Bull. Inst. Egypt.* (1955), 36, No. 1, 119-27.
Geographical distribution of the fossil vertebrates. Lithological associations.

1–100222 — SHUKRI (N.M.) and BASTA (E.Z.). **Classification of the pyroclastic rocks of yaman** (Egyptian university scientific expedition to S.W. Arabia). *Bull. Inst. Egypt.* (1955), 36, No. 1, 165-75.
Microscopical study of high plateau of yaman. Systematic classifications. They show similar variations in mineralogical composition to those obssrved in the tertiary laves of yaman.

1–100223 — SHUKRI (N.M.) and BASTA (E.Z.). **Petrography of the Ikaline volcanic rocks of Yaman.**(Egyptian university scientific expedition to S.W. Arabie). *Bull. Inst. Egypt.* (1955), 36, No. 1, 129-64.
Tertiary and Pleistocene volcanic roks. Chemical and mineralogical analysis classifIcation (13 plates, 1 map). Biblography (29 references).

Biological Sciences

1–100224 — ATTIAH (H.H.). **A new eriophid mite on mango from Egypt** (Acarina). *Bull. Soc. Ent. Egypte*, (1055), 39, 379-83.
The original description of *Vasates nangifera* with notes about its control.

1–100225 — EL SAKKA (H.). **In arabic.** (Photosynthesis). *Risalatul-Kimia. Damaseus.* (1954), 3, No. 1, 54-6.
General review of the theories of the role that chlorphyll plays in photosynthesis.

1-100226 — GEISS (E.A.M.). **Anatomical identification of plant remains and other materials from:(1) El-Omari excavations at Helwan from neolithic period; (2) The excavations at Helwan from the first dynasy.** *Bull. Inst. Egypt.* (1955), 36, No. 1, 227-35.
29 Tombs in Helwan. Clothes, hairs vegetable remaining.

1-100227 — HABIB (A.). **Some biological aspects of the** Eulecanium corni **Bouché group** (Hemipetera, Coccidae). *Bull. Soc. Ent. Egypt.* (1955), 39, No. 217-28.
A study of E. Corni from the aspects of synonymy, host plants, life cycle and generations, effect of temperature on the eggs, and the population density.

1-100228 — HABIB (A.). **The behaviour of the nymphal stages of** Eulecanium corni **bouche** (Hempitera:Coccidae). *Bull. Soc. Ent. Egypte*, (1955), 39, 229-49.
The behaviour of the nymphs of E. corni in response to light, temperature, gravity, humidity, and some combinations of these factors.

1-100229 — HAMMAD (S.M.) and EL-DEEB (A.L.). **The mor phology of three weevil larvae from Egypt** (Celeoptera:Curculionidae). *Bull. Soc. Ent. Egypt.* (1955), 39, 285-9.
The arvae described in this paper belong to *Rhyncolus cylimdsns* Boh., Alcides willcocksi Pic. and Hypurus bertrandi Perr.ndr-.

1-100230 — HAMMAD (S.M.). **On some dipterous leaf-miners from Egypt.** *Bull. Soc. Egypt.* (1955), 39, No. 391-4.
The nature of damage is here discussed as a means of separation between *Liriomyza trifolii* Burgess, *Agronvza nana* Mg., *Phytonyza atricornis* Mg., and *Pegonyia hyoscani* betae Curtis.

1-100231 — HOSY (M.M.). **Notes on the effect of some secondary environmental conditions on the activity of nocturnal macrolepidoptera.** *Bull. Soc. Ent. Egypt.* (1955), 39, 297-314.
The factors studied in this papsr are moonlight, fog, night duration of rainfall, thundery weather conditions and baromentric pressure, and wind direction.

1-100232 — IBRAHIM (M.M.). **Studies on** Coccinella undecinpunctata aegyptiaca **Reiche. I. Preliminary notes and morphology of the early stages (coleoptera:coccinellidae).** *Pull. Soc. Ent.* Egypt, (1955), 39, 251-74.
Illustrated descriptions of the egg, the four larval instars, and the pupa of this predator, with a note about the technique of breeding.

1-100233 — IBRAHIM (M.M.). **Studies on** Coccinella undecip punctata eagyptiaca **Reiche. II. Biology and life history** (Coleopl. tera:coccinellidae). *Bull. Soc. Ent. Egypte*, (1955), 39, 395-423r
The biology of the ladybird beetle and its real role as auseful insect in Egypt.

1-100234 — KHALIFA (A.) and BADAWY (A.). **Biological studies on** Tribolium confusum **Duv., Tribolium Dbst., and** Latheticus oryzae **Waterch.** (Coelepotera:Tenebrionidae).*Bull, Soc. Ent. Egypte*, (1955), 39, 351-73.
A comparative study on the duration of stages, number of generation, and seasonal history for these three beetles

1-100235 — KHALIFA (A.) and BADAWY (A.). **The effect of nutrition on the biology of** Tribolium confusum **Duv.,** Tribolium castaneum **Hbst., and** Latheticus oryzae **waterh.** (Coleoptera! Tenebrionidae). *Bull. Soc. Ent. Egypte*, (1955), 39, 337-50.
The effect of wheat, maize and rice used in different forms as food on the duration of the stages, number of instars, oviposition rate, and population density of these insects.

1-100236 — KHATTAT (F.H.). **An account of the larvae of culicine mosquitoes in Iraq.** *Bull. Endem. Dis. Baghdad.* (1955), 1, No. 2, 156.
One species new to this region. Taxonomic features, sketches of species studied, tables of chaetotaxy and taxonomic variation Physio-chemical examination in a typical breeding place near thilla, importance of these finding.

1-100237 — LEWIS (D.J.). **Calliphoridae of medical interest in the Sudan (Diptera).** *Bull. Soc. Ent. Egypte*, (1955), 39, No. 275-96.
The distribution of fourty seven species and one variety of calliphorids in the Sudan, with some notes about their habits.

1-100238 — MADKOUR (M.K.). **In arabic.** (Estimation of error and limit in biological essay). *Rep. Pharm. Soc. Egypt.* (1955), 37, No. 2, 1-13.
Deflnition of biological essay causes of differences in its results and its importance.

1-100239 — MAHMOUD (A.). **In arabic.** (Biology of Egyptian Exkroch and ways of getting rid of it.). *Resalet-el-Elm. Cairo*, (1955), 22, No. 1, 18-24.
Different kinds, biology and ways of getting rid of it.

1-100240 — PRIESNER (H.). **A review of the Pompilidae of Egypte** (Hymenoptera). *Bull. Soc. Ent. Egypte*, (1955), 39, 1-215.
A through review of this family with many new species and other categories.

1-100241 — SHAWKI (M.Y.). Canis familiaris aegyptica **from predynastic Maadi-Egypt.** *Bull. Inst. Egypt.* (1955), 36, No. 1, 105-9.
Description of well-preserved remains discovered in 1947.

1-100242 — SHAWKI (M.Y.). **An interpretation of** Arsinoitherium. *Bull. Inst. Egypt.* (1955), 36, No. 1, 111-8.
Investigation of the musculature especially in connection with its feeding mechanism and mode of living.

1-100243 — SHAWKI (M.Y.). **The afinities of** Parioxys ferricolus **and the phylogeny of the «eryoypsiod" amphibians.** *Bull. Inst. Egypt.* (1955), 36, No. 1, 77-104.
A new family «the Parisoydae" closed related to the Dissorophidae, should be erected. Modiflcations of the current views on the phylogey and toxonomy of the eryopsid amphibians.

1-100244 — SHAWKI (M.Y.). **The skeletal structure of** Parioxys ferricolus **cope.** *Bull. Inst. Egypt.* (1955), 36, No. 1, 41-76.
Material of the Museum of comparative zoology, Harvard from Wichita Group of the lower Permain Redbeds of Texas. Considerations upon habits of Parioxys. Biblography (26 references) (9 plates).

1-100245 — SHOKRI (I.S.). **The effect of ethylene on stomata of** Pelargonium zonale. *Bull. Inst. Egypt.* (1955), 36, No. 1, 269-86.
The stomata of both sides of leaf behave similarly toward light and air flow. 0,1% ethylene has no effect on stomata behaviour of Pelargonium. 1% ethylene has a closing effect on the stomata. The stomata of the control cup were affected by the ethylene-air stream passing into the experimented cup this closure is probably due to shock effect produced by such a high concentration of ethylene.

1-100246 — SOLIMAN (A.A.) and EISA (E.A.). **Preliminary studies on the carbohydrate storage in the honeybee,** Apis mellifica (Hymenoptera:Apidae). *Bull. Soc. Ent. Egypt.* (1955), 38, 375-8.
The carbohydrate storage in the body of the honeybee dicreases with rise of temperature, high wind action and starvation.

1-100247 — TOLBA (M.K.) and GHANEM (S.S.). **Studies on the physiology of hostparasite relations.** *Bull. Inst. Egypt.* (1955), 36, No. 1, 193-220.
Growth and pectinase enzyme production by three soft rot bacteria on media containing different sugars or mixtures of sugars with special reference to the effect of some micronutrient elements. Physiological analysis of the susceptibility of these tomats varieties growing in Egypt to attack by *Fusarion colmorum and F. oxysporum*

1–100248 — WAGNERE. **Nachtrag zu meiner Arbeit «Eine neue crius-Art aus Palazstina"** (Hemiptera-Heteroptera:Anthocoridae). **Note to may work «A new Orius of Palestine"**. *Bull. Soc. Ent. Egypt.* (1955), 39, 335.

1–100249 — WAFA (A.K.). **Temperature as a factor controlling the commencement of honeybees flighting and honeybee flight activity distribution during the various months of the year** (Hymenoptera:apidae). *Bull. Soc. Ent. Egypt.* (1955), 39, 315-34.
A study representing the relationship existing between the maximum and minimum temperatures of the atmosphere and the temperature at which bees start and cease to fly.

1–100250 — ZAEARIA (H.). **Further study on the ecology of the interemediate host of** Schistosoma haematobium, Bulinum truncatus **Baylis.** *Bull. Endem. Dis. Baghdad.* (1955), 1, No. 2, 123-55.
Bulinus favours canal sectors which are partially shaded and contain an ample supply of natural foods, for in- stance *Cladophora* Brief exposure to temperatures of -2⁰ c or 50⁰ c were lethal to the snail. Method of sulphation is described, effects of this method.

Medical Sciences

GENERALITIES.

1–100251 — ABDEL AZIZ (K.E.). **In arabic.** (Atomic energy and medicine). *Resalet-el-Elm. Cairo,* (1954), 21, No. 4, 228-9.
Use of β and ǎ rays and its application in medicine.

1–100252 — FARRELL (H.B.McD.). **Dearth of children among the Azande.** *Sudan Notes. and Rec.* (1954), 35, No. 1, 7-21.
Statistics. Aetiological cousiderations. Résumé in Arabic.

1–100253 — PIRKER (H.). **Problems of rehabilitation in the Middle East.** *J. Fac. Med. Iarq.* (1955), 19, No. 1, 26-35.
Adress given on the Annual General Meeting of Middle East Branch of the British Medical Association.

1–100254 — SHARAF (A.). **Sex factor in marriage and in some problems associated with sexual life.** *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 8, 1-23.
General exposition.

ANATOMY.

1–100255 — ABD el-HALIM (S.). **Osteogenesis 'imperfecta, with a case report.** *Gaz. Fac. Med. Cairo,* (1954), 20, No. 1/2, 62-65
The condition, restricted to pathological disturbances in bone formation, is discussed, and one case is reported.

PHYSIOLOGY.

1–100256 — ROHAYEM (H.). **The action of quaternary ammonium coumpounds on the nerve centres of the dog.** *Gaz. Fac. Med. Cairo,* (1954), 20, No. 1/2, 75-80.
Tetramethyl ammonium iodide (TMA) and tetraethylammonium chloride (TEA) were tested to compare their actions en the central and on the peripheral synapses, and to explain the differences obtained by previous workers in the central effects of TEA, follwing intrathecal and intravenous injection.

ENDOCRINOLOGY.

1–100257 — KEUSSEOGLOU (A.). **Traitement hormonal de la petite azotémie.** *J. Egypt. Med. Ass.* (1954), 37, No. 11/12, 1293-97.
The hormonal treatment of slilgt azotaemias of the fifties is discussed. Up to now testosterone was employed in theses cases. The A. combined it with suprarenal cortex hormone if there appeared to be adrenal deficiency. A. employed desoxycorticosterone and testosterone (Sterandryl and syncortyl Roussel) with satisfactory results.

1–100258 — SOLIMAN (F.A.), ZAHRAN (M.), SAMEH (M.) and GHANEM (Y.S.). **The levels of thyrotrophic and gonadotrophic hormones in the blood of mature and immature famale rabbits.** *Gaz. Fac. Med. Cairo,* (1954), 20, No. 1/2, 54-58.
Thyrotrophic and gonadotrophic hormone levels in the blood of immature, oestrous, and pseudopregnant rabbits were determined with the chick assay Thyrotrophic hormone method. Level was significantly higher in oestrous rabbits than in pseudopregnant and immature ones. The gonadotrophic hormone level of oestrous and of pseudo-pregnant rabbits also was significantly higher than of immature ones.

NUTRITION.

1–100259 — EL-DENASOURY (M.). **In arabic.** (General idea of the functions of vitamins). *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 7, 10-13.
On the importance of different soluble and insoluble vitamines.

1–100260 — KARIM (M.A.). **Importance of choline as a lipotropic and a dietary factor.** *Medicus. Karachi.* (1955), 10, No. 1, 32-37.
A general survey on the subject.

1–100261 — MONTASER (A.). **In arabic.** (Science and food problem). *Resalt-el-Elm., Cairo,* (1955), 22, No. 1, 25.

HEMATOLOGY.

1–100262 — EL-ENASOURY (M.). **In arabic.** (Blood subtituents). *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 9, 10-11.
General study of the problem.

1–100263 — EL-DENASOURY (M.). **In arabic.** (Hoemoglobin). *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 8, 13-15.
Blood constituents and globulin, preparation, characters and uses.

1–100264 — EL-TOBGY (A.F.). **Successful treatment of a case of purpura haemorrhagica with fundus lesions.** *J. Egypt. Med. Ass.* (1954), 37, No. 11/12, 1298-1301.
After discussing the conditions in general the A. reports on a case which was cured by blood transfusions, cebion injections, and styphnon.

1–100265 — FAHIM (I.). **In arabic.** (Coagulants and anticoagulants) *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 9, 7-9.
Discovery and general use to control hoemorhage and thrombosis. What makes blood fiuid inside the blood vessels and clots outside the vessels?

1-100266 — TAHA (S.M.D.), DIMMETTE (R.M.) and RAGHEB (M.). **Liver function tests and pathology in a case of target cell anaemia.** *Gaz. Fac. Med. Cairo*, (1954), 20, No. 1/2, 59-61.
Target cells may occur in conditions other than Cooley's anaemia, and examination of the peripheral blood is thus not diagnostic. A. A. report a case of jaundice of 14 yeras, duration, with target cells in the peripheral blood. Besides a complete blood examination, liver function was tested and a liver biopsy obtained. The case was one of haemolytic jaundice. The pathological picture is due to the long duration of the haemolytic process and the reactions secondary to it.

GENERAL PATOLOGY.

1-100267 — ABBOUD (M.A.) and ALFY (O.). **Situs inversus. Report on six cases.** *Gaz. Fac. Med. Cairo*, (1954), 20, No. 1/2, 69-74.

In a study of 75 cases of congenital heart disease, situs inversus was found in 6 (8%). Of these cases, 3(50%) were uncomplicated, 2 (33.3%) were associated with cyanosis and one (16.6%) was a case of laevocardia. X-ray photographs and E.C.G. tracings of the cases are shown.

IMMUNOLOGY ANTIBIOTICS.

1-100268 — GABREK (S.). **In arabic.** (Abtibiotics). **IV.** *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 7, 17-19.

1-100269 — HASSAN (I.M.). **Study on a dermal strain of vaccinia virus adapted to the chorio-allantoic membrane of the chick embryo.** *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1216-29.

A strain of dermal calf lymph vaccinia, obtained in purfies, state by adopting it to the CAM of developing chick embryod was used in human vaccinatises. No severe local or general reactions comparable with those following calf lymph vaccine occurred. Experimentally, the strain did not produce generalisation, and had no neurotropic capacity.

INFECTIOUS DISEASES.

1-100270 — ABDEL KHALIK (A.K.) and ABDIN (Z.H.). **Some aspects of poliomyelitis in Egypt.** *Gaz. Fac. Med. Cairo*, (1954), 19, No. 1/2-1-10.

An epidemiological review of the disease which shows that polio in Egypt is still a true infantile paralysis. The symptomatology in this country also differs from that reported from America and England. The importance of earl diagnosis (in the preparalytic stage) is emphasised, and measures of prevention discussed.

1-100271 — ABDEL MESSIH (G.). **Poliomyelitis.** *Med. Press. Egypt.* (1955), 156, No. 3, 113-25.
Treatment. Bibliography (21 references).

1-100272 — ABOU-AUF (A.). **In arabic.** (Viruses I.). *Rep. Pharm. Soc. Egypt.* (1955), 37, No. 4, 6-13.

Virus-diseases, immunity by vaccines and different methods of its preparation.

1-100273 — ABDEL MESSIH (G.). **Thiocymetin (win.** 5063.2) **In treatment of infectious diseases.** *J. Egypt. Pub. Health. Assoe.* (1954), 29, No. 1/2, 9-26.

This cymetin is effective in treatment of enterica, cuts short the course of fever just as chloramphenicol if not more raped. Observation. of many cases.

1-100274 — EL-IMARI (A.S.). **A case of relapsing fever resistant to salvarsan therapy.** *J. Fac. Med. Iraq.* (1955), 19, No. 1, 36.
Clinical history.

1-100275 — FRIEDHEILM (E.A.H.). **Principles of developing new chemotherapeutic agents.** *J. Egypt. Pub. Health. Assoe.* (1954), 29, No. 1/2, 27-41.

Lecture at U.S. naval medical research unit.

1-100276 — HALAWANI (A.) and ABDALLAH (A.). **Cholangitis lenta. Two cases.** *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1205-11.

Brief outline of the diagnostic features of the disease, its course and its treatment, followed by a report on two cases.

TROPICAL DISEASES.

1-100277 — AZIZ (A.). **Haemoglobinuria (blackwater fever) in Baluchistan.** *Medicus. Karachi.* (1955), 10, No. 1, 27-31.
Report on 5 cases of the disease occurring in Baluchistan with a slheme for an antimalarial cauepaign.

1-100278 — BIBAWI (E.), MAHFOUZ (M.M.) and MASSOUDA (B.). **The spleen-carotid time and its evaluation in bilharzial heptatic fibrosis.** *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1185-92.
Description of a new test, the lobelin spleen-carotid tissue, which in absence of portal obstruction measures the rate of portal blood fiow, and in the presence of such obstruction is used as a test for the presence and degree of collateral circulation.

1-100279 — EL-GINDY (M.S.). **Incidence of** Schistosoma mansoni **in the vector snail** Planorbis biossyi. *J. Egypt. Med. Ass.* (1954), 37, No. 11/12, 1259-1271.

Examination of 15064 Planorbis of different ages, from a ditch known to be highly endemic for S. mansoni, revealed seasonal fiuctuation of the infection rate. Seasonal variation is due to water condition, temperature, age of snails, intensity of pollution, and duration of infection in the snails. High temperatures cause decline in infection rate. Young snails are rarely found infected. Infection may subside sportaneously with time in some snails.

1-100280 — GESMAN (A.). **Notes on various molluscan genera of the family Planorbidae involved in the trasmission of bilharziasis in Africa and the Near East.** *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1163-84.

Classiflcation and description of Planorbinae and Buliniae. Vectorparasite relationships. Bibliography (53 references).

1-100281 — HOOGSTRAAL (H.). **Ticks (ixodiodea) and their medical relations in the Near East.** *J. Egypt. Pub. Health. Assoc.* (1954), 29, No. 1/2, 1-8.

The known tick-borne diseases of the Near East are relapsing fever, tularemia, Q fever, and anthrax. Others undoubtedly await discovery. Ticks species known to be disease vectors or to bite man in this area are: *Ornithodoros erraticus, O. tholozani tholozani, O. lahorensis, O. conceps, O. savignyi,* and *O. salahi, Argas petsicus, A. refilexus, A. vespertilionis* group, and A. boueti; Rhipicephalus sanguineus sanguineous and *R. bnrsa bursa, Hyalomma dromedarii, H. detritum, H. excavatum, H. ruflpes ruflpes,* and *H. savignyi.*

1-100282 — KUNTZ (R.E.). **Preliminary report on the susceptibility of laboratory animals to infection by** Schistosoma haematobium. *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1193-202.

Small animals exposed to *S. haematobium* cercariae were: albino rats and mice, golden hamsters, cotton rats,and guinea pigs, Larger animals: cats, dogs, rabbits, goats, monkeys, baboons. Albino mice and hausters are considered usable for experimental haematobium schistosomiasis, white rats,cotton rats and ginnea pigs, poor hosts, rabbits and dogs were refractive to infection. The primates are good hosts for experimental schistosomasis, but true animals, as well as the aceptable rodents, demonstrate variable degrees of susceptibility for *S. haematobium.*

1-100283 — LAWLESS (D.K.). **A preliminary report on a rapid permanent-mount stain technic for the diagnosis and recognition of intestinal protozoa.** *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1202-4.
Described two and a half minute permanent mount staining technique is simple and easy. Staining characteristics of intestinal protozoa are similar to those of ironhaematoxylin preparations.

1-100284 — PRIGNLE (G.). **The national campaign against malaria in Iraq, progress report.** 1946-1952 I. *Bull. Endem. Dis. Baghdad.* (1955), 1, No. 2, 87-117.
The development of malaria control, organisation, statistics.

1-100285 — SHAMMAS (J.A.). **Hydatid disease of the central nervous system in Iraq.** *J. Fac. Med. Iraq.* (1955), 18, No. 56, 63 -79.
Five clinical cases are analysed in detail.

1-100286 — TALLAT (S.M.). **Bilhariza ova in the sputum.** *Gaz. Fac. Med. Cairo*, (1954), 10, 1/2, 66-68.
Schistosoma ova were found in the sputa of 12 out of 20 patients with cough and expectoration, showing evidence of bilharziasis. A technique of sputum examination is described and other investigation and findings discussed.

CARDISVASCULAR DISEASES.

1-100387 — ABDIN (Z.H.) and ABDIN (F.H.). **Fiedler's myocarditis with report of 5 cases in children; and with special views on treatment and pathogenesis.** *Gaz. Fac. Med. Cairo*, (1954), 20, No. 1/2, 42-53.
Isolated myocarditis is reviewed, clinically and pathologically, and treatment and prognosis discussed. A new line of therapy has been employed in 5 cases. It is suggested that a process of altered sensitivity is involved in the pathogenesis, and that a more intimate relation with asthma may exist.

GASTRIC DISEASES.

1-100288 — HELOU (A.) et TYAN (E.). **Sur l'interprétation de l'hyperglycémie provoquée.** *J. Egypt. Med. Ass.* (1955), 37, No. 11/12, 1272-1274.
A.A point out that the blood sugar curve, being the result of antagonistic hormonal effects (stimulating and depressing glycaemia), may be characterised by the abnormality of any of its components, and therefore requires detailed analysis, the interpretation of the results depending on the individual case.

TUBERCULOSIS and CHEST DISEASES.

1-100289 — BOCTOR (H.B.). **Semb thoracoplasty-a modi«cation.** *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1212-5.
Description of a modification of the semb operation, white move extensive stripping down to the 7th rib in the first stage. A three-rib thoracic thoracoplasy with this nodification may be sufficient in selected cases to close medium-sized apical cavities. With X-ray pictures of operated cases.

1-100290 — McDOUGALL (J.B.). **Chemotherapy in a Cairo Chest clinic.** *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 10-15.
Results obtained in the treatment of pulmonary tuberculosis by isoniacid, streptomycin and paraminosalicylic acid (120 cases).

1-100291 — FAHIM (I.). **In arabic.** (The recent antituberculosis drugs was based on an Egyptian idea). *Rep. Pharm. Soc. Egypt.* (1955), 37, No. 2, 18-20.
Nictonic acid diminution causes pellagra, pellagrins do not usually contract T.B., through they are undernourished. A drug which competes with nicotinic acid could cure Y.E. Thus Isonictinic acid hydrazine was discovered.

ODONTOLOGY.

1-100292 — MANGOURY (M.H.). **The interglobular spaces.** *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1250-7.
An anatomo-histological study.

OPHTALMOLOGY.

1-100293 — EL-TOBGY (A.F.). **Recent and old conceptions on the control and prophylaxis of acute epidemic opthalmias and trachoma.** *J. Egypt. Med. Ass.* (1954), 37, No. 11/12, 1302-1308.
An outline of a scheme for the control of acute ophthalmias and trachoma based on experience gained in the past. A short history of these eye diseases is given.

1-100294 — SHAH (M.A.), YSUF (M.) and SAJID (H.). **Diamox in advanced glaucoma.** *Medicus. Karachi.* (1955), 10, No. 1, 18-26.
Results in a series of 20 advanced glaucoma ceses tend to coufirm the ability of oiaxmox to reduce intra-ocular tension the drug appears to act on the eiliary epithelium. Siumltaneous use of miolics locally is of help in lowering tension. After an initial fall the tension tends to rise again. No side effects observed in this series. Fall in systolic and diastolic pressure to parallel the fall in intra-oculas tension.

OTORHYNOLARINGOLOGY.

1-100295 — ABDUL MAJID (K.). **The managements of epistaxis.** *J. Fac. Med. Iraq.* (1955), 19, No. 2, 6-05.
Classiflcation, etiology, anatomy, treatment. Posterion epistaxis.

1-100296 — ALI (D.S.). **Review and discussion of the functions of the palatine tonsils.** *J. Fac. Med. Iraq.* (1955), 19, No. 1, 1-8.
Conception of tonsillar functions at present and in the past. Personal point of view in the form of discussions.

1-100297 — BOTROS (G.). **Suction irrigation apparatus for the teatmernt of chronic tonsillitis.** *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1234-5.
Description of the apparatus, which has given good results in in the treatment of cases of chronic tansillitis, hyper trophic and atrophic. Other indications:Preparation of some cases for operation, treatment of diphtheria-cariers (using penicillin sol.) taking of specimens from openings of salivary ducts (using suction only). not to be used in acute cases and in children.

1-100298 — EL-MOFTY (A.). **Congenital complete atresia of posterior choana.** *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1230-3.
Presentation of a case oif unilatered congen. Choanal atresia, treated by simple puricing of the occlusion.

DERMATOLOGY.

1-100299 — AKRAWI (F.). **The unknown in bejel.** *Bull. Endem. Dis. Baghdad.* (1955), 1, No. 2, 118-22.
Nature of this non-venereal endemic syphilis of Arabic-Middle East. Aortitis in bejel, Neuro-bejel, congenital and natural trans mission, Treatment.

1-100300 — ALI (A.) ROAIH (M.F.A.). **Acne of menstruation.** *Gaz. Fac. Med. Cairo*, (1954), 20, No. 1/2, 30-41.
A study of the condition and a trial of autoserotherapy according to the method of Geber. With proper selection of cases this treatment gave a high degree of success. The type of acne of menses which reponds to auto sero therapy, and which is of truly allergic origin, is described in detail.

1-100301 — EL-ZAWAHRY (M.). **Congenital skin anomalies-Report on 12 cases.** *Gaz. Fac. Med. Cairo*, (1954), 20, No. 1/2, 81-84.
Presentation of a series of congenital anomalies with photographs (congectodermal defect, alopecia, epidermolysis bullosa, ichthyosis foetalis mitior, lymphangioma circumscriptum, naevus unius, lateralis, tylosis, v. Recklinghausen's disease, xerodermia pigmentosa).

GYNECOLOGY and OBSTETRICS.

1-100302 — SAMARRAI (K.). and AL-BUSTANI (M.). **X-ray study of the uterus and fallopian tubes in sterility.** *J. Fac. Med. Iraq.* (1955), 19, No. 2, 39-46.
Technical details.

1-100303 — ZAKI (S.) **In arabic** (Sterility and artifIcial insemination). *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 10, 10-14.

NEUROLOGY and PSIQUIATRY.

1-100304 — SHAMMAS (J.A.) and SHAMMAS (J.). **Oedipus complex in iraqi males.** *J. Fac. Med. Iraq.* (1955), 19, No. 1, 9-25.
Study of 10 cases. General considerations.

1-100305 — TALAAT (S.M.). **Stellate ganglion block in Bell's palsy-Report on 29 cases.** *Gaz. Fac. Med. Cairo*, (1954), 20, No. 1/2, 89-90.
Treatment by ganglion block has given satisfactory results, particularly if treatment is instituted early.

CANCEROLOGY.

1-100306 — GRACE (H.K.). **The incidence of malignant growths in the hospital population of Egypt.** *Gaz. Fac. Med. Cairo*, (1954), 20, No. 1/2, 11-29.

A survey based on a study of all autopsies and biopsies carried out in the Path. Dept., Kasr el Aini hosp., between 1934 and 1943. Number of cases 11312;malignancy proved histologically: 2185.

1-100307 — HALLAC (I.). **Le cancer de l'estomac.** *J. Egypt. Med. Ass.* (1954), 37, No. 11/12, 1275-1292.

Gastric cancer, of frequent occurrence in Europe, America etc., is relatively rare in Syria. Early diagnosis is possible in the specialised centres, and particularly if the patients, realising the danger of this serious affection, submit to systematic medical examination. Cytodiagnosis and gastroscopy are new exploratory methods which give interesting and very useful results in the hands of specialists. Surgery can cure cancer in the initial stages, *i.e.*, cancer in situ, and in advanced cases result in a few years survival. Close collaboration of surgeons and medical men is necessary.

1-100308 — MINAISSY (A.). **Haemangioma of the right humerus.** *Gaz. Fac. Med. Cairo*, (1954), 20, No. 1/2, 85-88.

Haemangioma of the bones of the extremities is very rare.The haemangioma presented in extenseve. Possible lines of treatment are discussed.

SURGERY. ANESTESIOLOGY.

1-100309 — AL OMERI (M.). **A case report of a cystic duct dilatation after cholecystectomy causing post-cholecystectomy syndroms.** *J. Fac. Med. Iraq.* (1955), 19, No. 2, 47-53.

Good illustration of post cholecystectomy syndrome. The surgent should always try his best to ligate and divide the cystic duct as close as possible to the hepatic duct so that no diverticulum is left.

1-100310 — EL-ZORKANY (K.). **Contact pressure arthrodesis.** *Gaz. Fac. Med. Cairo*, (1954), 20, No. 1/2, 91-92.

Pressure arthodesis was used in cases of TB of the knee joint (quiescent subacute, and one active without any previous treatment), fracture of tibial condyles, infective arthritis. The technique of the operation and the antibiotic or drug therapy given are described. Results were satisfactory.

1-100311 — FAHIM (I.). **In arabic.** (History of anaesthesia). *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 8, 9-18.

Surgery before anaethesia, how it was dicovered and improved and made surgical operations possible.

1-100312 — MAGHRABY (A.F.). **Emergency anaesthesia.** *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1240-9.

A. points out the danger of anaesthesia without any preliminary preparation. A number of so-called emergencies are not true but relative emergencies. Even in true surgical emergencies, some preparation is essential. Three important points:Full stomachs. resuscitation, and premedication, are discussed and the various types of anaesthssia, outlined.

1-100313 — THOREK (M.). **Cardiac arrest during anaesthesia.** *Medicus. Karachi.* (1955), 10, No. 1, 1-17.

Reprt of 11 cases observed in the past 10 yrs at the American hospital of Chicago Six patients were saved and 5 died. Aetioloy incidenxe, diagnosis treatment and prognosis are discussed.

PHYSIOTHERAPY.

1-100314 — EL-IMARI (A.S.). **Physiotherapy in asthma and bronchitis.** *J. Fac. Med. Iraq.* (1955), 19, No. 2, 54-59.

Breathing exercises of great value to asthmatic patients and those with other chest diseases. Illustrations.

1-100315 — HASSAB (H.K.). **Personal experience in the management of some complications of cut-wrist.** *J. Egypt. Med. Ass.* (1954), 37, No. 10, 1236-9.
Complications concerned are:loss of tendon gliding after suture imperfect results of ulnar and median nerve suture.

1-100316 — MAHFOUZ (M.) and EL-DEEB (A.A.). **Gas in the intervertebral discs or vacuum discs.** *Gaz. Fac. Med. Cairo*, (1954), 20, No. 1/2, 93-95.
This is a rare phenomenon which is found in degenerative disk disease and spondylitis deformations. AA. present a case with X-ray photographs.

PHARMACOLOGY.

1-100317 — ABD EL KADER (S.A.). **In arabic.**-(The physiological effect of the solvents). *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 8, 17-18.
Description of certain toxological effects of some solvents used in industry.

1-100318 — ABDEL-RAHMAN (A.). **In arabic.** (Material for making better fiavouring. III. Elixir). *Rep. Pharm. Soc. Egypt.* (1955), 37, No. 2, 31-36.
Constitution and preparation.

1-100319 — EL-SAID (F.). **In arabic.** (Dextran). *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 9, 16-18.
Preparation, propeities and uses chemical and physical means used to break down the complex.Conversion of suitable fractions to sulphonate or nitrate.

1-100320 — FARRAG (M.K.). **In arabic.** (Hypnotics). *Rep. Pharm. Soc. Egypt.* (1955), 37, No. 2, 22-25.
Historical considerations and general characters.

1-100321 — GUILLOT (M.). **Vues modernes scr la sterilisation des solutes injectables pharmaceutiques.** *Rep. Pharm. Soc. Egypt.* (1954), 36, No. 7, 1-16.
Revue des moyens physiques autres que la chaleur utilisables dans les laboratiores et l'industrie. A l'heure actuelle on est encore au stade de la recherche. Bibliographie (36 references).

1-100322 — REHIM (H.). **In arabic** (Study of half el burr its constituents and its medical effects). *Rep. Pharm. Soc. Egypt.* (1954), 36, 7-9.
Historical introduction, extraction of the plat and its constituents, physical and chemical investigation, physiological study.

Engineering

1-100323 — FEKRY (M.R.). **In arabic.** (Ampoule industry). *Rep. Pharm. Soc Egypt.* (1954), 36, No. 7, 20-27.

Study of 3 different machines used in Egyptian factories for the washing of ampules.

1-100324 — PILKINGTON (W.G.). **The Lancashire textile industry as a consumer of long stapled cottons.** *Egypt. Cotton. Gaz.* (1955), 25, *May*, 1-9.
The future of different long-stapled cotton, from Egypt and other new localities is discussed in connection with the various industrial purposes from Lancashire's point of view.

Agricultural Sciences

GENERALITIES.

1-100325 — ANDREWS (F.W.). **Weeds of the Gezira Scheme.** *Bull. Min. Agr. Sudan.* (1954), No. 13, 1-66.
An illustrated review of the commonest weeds in the Gezira, Sudan, with a key for easier identiflcation of these weeds.

1-100326 — FERGUSON (H.). **The Zande Scheme.** *Bull. Min Agr. Sudan*, (1954), No. 14, 1-30.
An agricultural project for the social and economic development of the people in the South-west of the Sudan.

1-100327 — JEFFERSON (J.H.K.). **Hafirs or development by surface water supplies in the Sudan.** *Field Div. Mem. Sudan* (1954), No. 7, 95-108.
Hafir, an Arabic word for a hole in the ground excavated for the storage of rainwater, how to be improved for more rain dependent agriculture.

1-100328 — MARAIY (S.). **In arabic.** (Agrarian reform in 2 Years). *Resalt-el-Elem. Cairo*, (1955), 22, No. 1, 3-13.
How Egypt make use of it for increasing the national and agricultural income.

1-100329 — McCALL (A.G.) and LEA-WILSON (K.L.). **Some notes on Zandeland.** *Field Div. Mem. Sudan.* (954), No. 6, 1-21.
General informations about the different aspects of life in Zandeland Sudan, with suggestions to help the social emergence and economic stability.

1-100330 — MOIR (T.R.G.). **Some aspects of agricultural development in the Sudan.** *Field Div. Mem. Sudan* (1954), No. 5, 1-37.
Agriculture and it, possible development in the different areas of the Sudan, followed by a glossary of Arabic terms and a list of memoirs published by the ministry of Agriculture.

SOIL SCIENCE

1-00331 — JEWITT (T.N.). **Gezira soil.** *Bull. Min. Agr. Sudan* (1955), No. 12, 1-83.
A summary of the work done in the Sudan on Gezira soil during the last fifty years, with special reference to the agricultural background of the work.

VEGETAL PRODUCTION.

1-100332 — BROWN (C.H.). **The long term view.** *Egypt. Cotton. Gaz.* (1955), 25, *May*, 25-7.
The evolution of cotton as a commercial crop, and the hope for more evolutionary progress'in cotton breeding and growing.

1-100333 — CHAFFAR (M.A.). **A study of the evolutionary relationship of Egyptian cotton.** *Egypt. Cotton. Gaz.* (1955), 25, *May*, 52-9.
The history of establishing certian desirable characters in the modern varietes of the Egyptian cotton.

1-100334 — CHAPOT (H.). **Les agrumes au Liban.** *Station Agronomique Libano-francaise., Tell-Amera.* (1954), 1-39.
Conditions générales de agrumuculture libananse. Statistiques. Modes d'exploitation. Commercialisation.

1-100335 — DABBOUS (R.). **The statistical position of Egyptian cotton at 30th April 1955.** *Egypt. Cotton. Gaz.* (1955), 25, *May*, 61-75.
A detailed economical report about the different varieties of Egyptian cotton. A comparison with similar notes of previous years is also listed.

1-100336 — EL ACKAOUI (H.F.). **Les méthodes de culture du blé en Egypte.** *Feuill. Agr., Alexandrie.* (1955), 13, No. 87, 123-9.
Emploi des deux méthodes «hérati" et aflr",conditions d'emploi de chacune d'elles. Résultats.

1-100337 —FERGUSON (H). **In arabic.** (Notes on cotton from the research division). *Arabic. Booklet. Min. Agr. Sudan,*(1954) No. 1, 1-57.
General knowledge of the various agricultural procedures in cotton growing with a supplement about cotton pests and disease in Gezira, Sudan.

1-100338 — GARBOUA (M.). **La culture du riz dans le delta du Nil.** *Feuill. Agr. Alexandrie.* (1955), 13, No. 87, 101-12.
Conditions écologiques et hydrauliques. Technique et routine de la riziculture. Suggestions en vue d'améliorer le rendement.

1-100339 — JONES (K.W.). **Further experiments in witchweed control.** *Res. Div. Mem. Sudan*, (1954), No. 46, 331-9.
Experiments to control *Striga hermontheca* Benth. by applying the hormone weed-killer 2,4-D, at different concentrations and times, on irrigated grain sorghum.

1-100340 — MACWILLIAM (R.G.). **Lanacashire grits its teeth.** *Egypt. Cotton. Gaz.* (1955), 25, *May*, 19-27.
The contraction in the cotton industry in Lancashire, and suggestions to overcome such decline.

1-100341 — ROBBIE (J.), and FISHER (F.W.). **Commercial horticulture in the Sudan. I. Citrus cultivation.** *Bull. Min. Agr Sudan*, (1954), No. 10, 1-46.
Citrus varieties in the Sudan and the necessary procedures for better growing in both nursery and orchard.

1-100342 — ROY (H.). **Le jasmin des Alpes maritimes et la rose de mai.** *Feuill. Agr., Alexandrie.* (1955), 13, N9. 87, 113-22.
Synthèse dss résultats obtenus dans le départment des Alpes maritimes. Conditions de culture. Parasites. Soins culturaux. Recoltes.

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